Bayesian Persuasion with Costly Messages[*]

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Abstract

We study a model of Bayesian persuasion where the Sender publicly designs a signal structure, *privately* observes the signal realization and then reports a message to the Receiver at a cost that depends on the signal realization. We provide sufficient conditions for full information revelation by the Sender, and these conditions are satisfied under many commonly studied communication games. Under these conditions, the Sender's (lack of) commitment in the persuasion problem is quantified as a communication cost to sustain the chosen belief distribution. We apply this approach to study test design and a lobbyist's incentive to generate and truthfully report new information.

Keywords: Bayesian persuasion, costly messages, partial commitment
JEL Classification: D82, D83, D72

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