Persuasion with Hard and Soft Information

Sulagna Dasgupta
University of Chicago,United States
sulagna@uchicago.edu

Abstract:

A privately informed sender (such as a student applying to a university) communicates with an uninformed receiver (such as the selection committee) about a two dimensional state (suppose his hard and soft skills). The sender's utility is independent of the state, and is monotonically increasing in (both components of) the receiver's action, which is taken to be equal to the posterior mean state. The sender can verifiably disclose the state's first dimension (e.g. hard skills, by means of an SAT score) with some probability, and can communicate about both dimensions via cheap talk (writing a personal essay, which he can use to persuade the selection committee about both his hard and soft skills). When the two dimensions are positively correlated, unraveling (as in Milgrom 1981) occurs if and only if the sender has evidence with probability one. When unraveling does not occur, the model features multiple equilibria. Varying across equilibria, I show that equilibria that feature more disclosure are worse for the sender, with the disclosure minimizing equilibrium being sender-best (minimum-disclosure principle). Using the minimum-disclosure principle, I fully characterize the sender-optimal equilibrium for several classes of sender preferences, such as linear, quasiconcave and symmetric quasiconvex and piecewise linear. As an extension, the minimum-disclosure principle is shown to continue to hold under certain equilibrium selection rules, even when there are multiple unverifiable dimensions and/or the sender's utility is non-monotonic in the posterior mean state.

Keywords: cheap talk, disclosure, evidence, persuasion, strategic communication, information design

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