

Information Design with Optimal Frame Choice*

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Abstract

We study a model of information design under asymmetric perception of the state space. Whereas the sender (she) perceives all payoff-relevant states of the world, the receiver does not. Persuasion occurs in two stages. The sender first designs the receiver's optimal frame by expanding or refining his perception of payoff-relevant states. Then, given the chosen frame, the sender designs an optimal information structure. We characterize the sender's tradeoff between keeping the agent in the dark and expanding/refining his perception of the state space. The optimal frame depends on how the receiver reacts to the discovery of new states or the refinement of his information partition. We characterize optimal persuasion under various standard frameworks to model beliefs under growing awareness: reverse Bayesianism, extended Bayesianism, and partition dependence with sub-additive new beliefs. We also discuss robust approaches to account for the possibility that the sender cannot anticipate how the receiver forms new beliefs after a frame change. Our analysis may shed light on the management of public panic events such as those after the COVID-19 pandemic outbreak.

Keywords: Information Design; Asymmetric Awareness; Framing.

JEL Classification: C7; D8; M3.

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