

TITLE: Mediating Conflict Negotiations: An Information Design Approach

ABSTRACT: The seminal work by Myerson and Satterthwaite (1983) highlights the difficulties in reaching an efficient settlement in a negotiation when one party possesses information that the other does not. This insight has been reiterated by various researchers across diverse contexts, leading to the conclusion that finding a mutually agreeable resolution can be difficult in the presence of information imbalances. In this paper, we explore a well-known negotiation framework where two parties are in disagreement over the distribution of a surplus that is known to both. The parties have two options: either find a mutually acceptable agreement to resolve the dispute, or resort to costly means, such as litigation, strikes, and warfare, as an outside option. Our paper has two main contributions. First, we approach this well-known negotiation framework from an information design perspective, seeking to identify peaceful resolutions across all possible informational structures. Second, we propose the use of inaccurate signals not only for negotiators but also for the designer (i.e., the mediator). This gives rise to a wide range of new problems in which mechanism design, information design, and Bayesian persuasion problems are special cases within our framework.