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The Space of Conflict in Communicative Action: Implications for System Design

Todd Davies

Symbolic Systems Program
Stanford University
Stanford, California, USA

ABSTRACT

Most work on collaboration technologies (GDSS, CSCW, etc.) has traditionally focused on supporting social action and communication in settings of relatively low goal conflict. This is appropriate in many organizational contexts, where common goals based on a shared management structure can be assumed. But much of communicative action in human societies occurs in an environment of conflict. We can distinguish at least two dimensions of conflict: one involving beliefs and one involving goals.

Conflict between parties attempting to achieve a joint action can be high or low on either dimension. When both belief and goal conflict are low, participants agree on the state of the world and the consequences of alternative actions, and also on what they are trying to achieve. Their task in this part of the conflict space is *coordination*, and their main need is for clear, efficient communication. This is the classic case of collaboration. When goal conflict is low but belief conflict is high, participants are apt to engage in *argumentation*. A systematic approach to resolving the belief conflict in this situation is that of "adversarial collaboration" (Tetlock & Mitchell 2009). Appropriate support technologies for resolving arguments include tools for data analysis, logical inference, and statistical testing. Social actors may, alternatively, be in low belief conflict but high goal conflict - a situation often best resolved through *negotiation*. In this case, participants agree about the consequences of future actions, but have different preferences among alternatives and must typically compromise. The support they need in this situation may involve technology that helps participants see possibilities such as Pareto-improving trades and the Best Alternative to a Negotiated Agreement (BATNA), with research showing that unaided bargains are often suboptimal (Bazerman & Neale 1992).

The most challenging region in the space of communicative action is where beliefs and goals are *both* highly in conflict between participants. But this is also the usual case in *deliberation*, when actors with competing perceptions and interests must reach a collective decision. Deliberation is challenging because

participants often cannot see whether conflict arises from competing goals or divergent beliefs, and can even have an incentive to misrepresent their true feelings on one or both dimensions. Technology support for deliberation is a relatively new but growing area of design, research, and practice (Davies & Gangadharan 2009). In this talk, I will elaborate upon the findings discussed in a recent review article on online deliberation design (Davies & Chandler 2012), suggest design principles that are likely to grow in importance in future deliberation systems, and summarize our recent experience designing the online deliberation platform known as "Deme".

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SPEAKER BIOGRAPHY

Todd Davies is the Associate Director of the Symbolic Systems Program at Stanford University, and a researcher in the area of online deliberation. With Seeta Peña Gangadharan, he co-edited the volume *Online Deliberation: Design, Research and Practice*. He is also the project leader for the software platform "Deme", which is currently being adapted for a large-scale national experiment in public deliberation about the future of health care, funded by the Agency for Health Care Research and Quality (AHRQ). He has coauthored several papers about software architecture for the social Web and online deliberation. Prior to that, he authored numerous papers in artificial intelligence and cognitive science. He received B.S. and M.S. degrees from Stanford in Statistics and in Data Analysis and Statistical Computing, respectively, in 1985, and a Ph.D. in Cognitive Psychology in 1995, all from Stanford University.