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Editorial: What do we say? The content of communication in strategic interactions

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Editorial on the Research Topic

What do we say? The content of communication in strategic interactions

This Research Topic focuses on the role of communication content and its impact on outcomes in strategic interactions. The theoretical framework commonly employed to study communication in strategic settings is the sender-receiver game, pioneered by Crawford and Sobel (1982). Building on their groundbreaking work, a substantial body of theoretical and experimental research has since delved into various aspects of sender-receiver games. For the Research Topic, two studies adopt the sender-receiver game framework, each exploring a distinct research question. A third study focuses on information transmission in a die-rolling task (e.g., Erat and Gneezy, 2012), while the fourth study considers continuous, free form communication in a trust game, contributing to a literature that includes Charness and Dufwenberg (2006).

In “Vague language and context dependence,” Lim and Wu investigate the efficiency advantage resulting from context dependence as a potential explanation for the presence of vague languages. This study falls within a more recent branch of research that focuses on vague languages (Lipman, 2009; Blume and Board, 2014). To explore this question, the present paper employs a sender-receiver game with two sequential senders and one receiver, where each sender receives a private message about a number. After the first sender sends a message to the second sender, the latter then communicates a message to the receiver, who subsequently takes an action. Importantly, all three players have perfectly aligned interests. The authors establish theoretical results indicating that literally vague language can be more efficient than literally precise language in these games due to the presence of context dependence. Furthermore, the authors conduct a laboratory experiment to test these environments, finding empirical support for the emergence of vague languages, particularly in a simple strategic environment with fewer actions. This research contributes to our understanding of how vague languages arise in strategic interactions.

In “Extreme and (non-extreme) punishments in sender-receiver games with judicial error: An experimental investigation,” Fong and Wang examine the impact of punishment on information transmission in a sender-receiver game with conflicts of interest. In this study, a knowledgeable sender communicates a message about the state of the world to the receiver, who then takes an action. The receiver subsequently receives a noisy signal regarding the true state and has the option to punish senders (for lying) at different punishment levels. The experimental results indicate that the presence of punishment opportunities encourages receivers to follow senders more, leading to improved overall information transmission.

Interestingly, senders do not necessarily exaggerate less under punishment. Furthermore, the findings reveal that as the strength of punishment increases, receivers tend to punish senders less. This suggests that individuals prioritize avoiding wrongful punishment of innocent senders over imposing harsher punishments on lying senders. This paper enhances our understanding of the role of punishment opportunities in the sender-receiver game.

Two other studies included in the Research Topic seek to bring the laboratory implementation of communication protocols close to the field counterpart. In naturally occurring economic relationships, senders and receivers of information employ a variety of means and devices to communicate. Cartwright and Xue's experiment "Truth-telling with a smartphone: The effect of communication media in strategic interactions" considers information transmission and honesty under various anonymity and social distance conditions. The authors substantially modify the die-roll reporting task employed for instance by Erat and Gneezy (2012) and compare three modes of communication. Following Gneezy (2005) and Erat and Gneezy's (2012) classification of lies, the design also implements different payoff structures to compare environments where dishonesty occurs as selfish lies, which benefit the dishonest party, vs. dishonesty as Pareto lies, which benefit both parties. To report on the outcomes of die rolls, depending on the treatment, subjects use pen and paper, an experimenter provided desktop computer or their own smartphone. Each modality represents a different combination of anonymity and social distance. Experimental findings indicate that when dishonesty results in a unilateral gain, payoffs with personal smartphone communication, which is viewed as socially distant and anonymous in this context, are consistent with higher dishonesty than with the other modes of communication. When dishonesty results in mutual gains, payoffs with communication via desktop computers provided by the experimenter, which is viewed as less socially distant and somewhat anonymous, are consistent with greater dishonesty than with the other two modes. Regardless of the game, communication via pen and paper, which is associated with lower anonymity, results in payoffs exhibiting lower dishonesty.

Much of contract theory rests on the notions that imperfect observability or verifiability of agents' actions, or their inability to pre-commit, have a profound impact on the structure of incentive provision in economic relationships. In environments where observability is limited or pre-commitment is difficult, truthful revelation of information and the efficiency of outcomes are driven by agents' beliefs about their counterpart's intentions and actions, including the degree of trust within the relationship. In "Initiating free-flow communication in trust games," Jobu Babin and Chauhan build on a fruitful prior literature dedicated to communication in the well-known trust game and its variants.

In this context, communication is often used to signal intentions and influence beliefs. For instance, Charness and Dufwenberg's (2006) influential study of a trust game with unobservable second mover action demonstrates that promises conveyed via pre-play free form messages play a key role in improving efficiency in the trust game. These authors attribute the effectiveness of promises to guilt aversion on the part of second movers. A series of follow-up studies examine variations on the communication protocols, as summarized for instance in Cartwright (2019). While Jobu Babin and Chauhan consider a traditional trust game, where the second mover's action can be inferred from the payoffs, their study broadly contributes to this literature. In their experiment, once initiated by a player, communication can take place throughout play via the subjects' personal smartphones. Interestingly, experimental findings indicate that first movers in the trust game are more likely to initiate communication than second movers and that outcomes are more efficient with communication. A classification of chat logs reveals that conversations between players often pertain to identity traits, which the authors interpret as direct attempts at signaling or screening.

The Research Topic contributes to a theoretical and experimental research program on the variety of ways in which communication influences decisions and outcomes in strategic interactions. All four studies mention interesting possible extensions for future work, suggesting that this area of research will continue to grow.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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