

Strategic Communication Networks

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Abstract

In this paper, we consider situations in which individuals want to choose an action close to others' actions as well as close to a payoff relevant state of nature with the ideal proximity to the common state varying across the agents. Before this coordination game with heterogeneous preferences is played, a cheap talk communication stage is offered to players who decide to whom they reveal the private information they hold about the state. The strategic information transmission taking place in the communication stage is characterized by a strategic communication network. We provide a direct link between players' preferences and the strategic communication network emerging at equilibrium, depending on the strength of the coordination motive and the prior information structure. Equilibrium strategic communication networks are characterized in a very tractable way and compared in term of efficiency. In general, a maximal strategic communication network may not exist and communication networks cannot be ordered in the sense of Pareto. However, expected social welfare always increases when the communication network expands. Strategic information transmission can be improved when group or public communication is allowed, and/or when information is certifiable.

Keywords: Cheap talk, coordination, partially verifiable types, public and private communication.

JEL Classification: C72; D82; D83; D85.