

RATIONALIZATION IN SIGNALING GAMES: THEORY AND APPLICATIONS

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ABSTRACT

We rely on work by Battigalli and Siniscalchi (2002a,b) to argue that the rationalizability approach is appropriate to analyze multistage games with genuine incomplete information. Focusing on Sender-Receiver games, we define a class of iterative solution procedures, featuring a notion of "forward induction": the Receiver tries to explain the Sender's signal in a way which is consistent with the Sender's strategic sophistication and certain restrictions on beliefs. These restrictions on beliefs are explicit and parametrize the solution procedure. The approach is illustrated by examples and applications. In a standard model with verifiable messages a full disclosure result is obtained (cf. Okuno-Fujihara et al., 1990). In a model of job market signalling (cf. Spence, 1974) the best separating equilibrium emerges as the unique rationalizable outcome only when the high and low ability workers are sufficiently different. Otherwise, rationalizability only puts bounds on the choice of education.

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