Modeling Task-Oriented Groups: From Ontology to Theory to Method

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Abstract

I use the social theory of M. S. Archer, for whom everyday life is partly shaped by the interplay of social and cultural systems, as a framework for modeling users in small, task-oriented, groups such as those found in classroom and decision-settings. Beginning at the ontological level, I suggest that the nature of social and educational reality is such that simulation offers the best hope for adequate explanation of the phenomena we know hope to come to know. I describe a particular social-psychological theory and consider a set of empirical results obtained via agent-based simulations derived from that social-psychological theory. The preliminary empirical research reported pertains to a model of how individual belief and a status distribution jointly shape the outcome of a particular simulated collective decision process. Finally, I recast previous work on purpose-driven modeling in terms of the importance accorded by Archer to personal concerns and projects in accounting for (individual and) group outcomes.