

Social Learning and Coordination Conventions in Inter-Generational Games: An Experiment in Lamarckian Evolutionary Dynamics

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Abstract

This is a paper on the creation and evolution of conventions of behavior in "inter-generational games". In these games a sequence of non-overlapping "generations" of players play a stage game for a finite number of periods and are then replaced by other agents who continue the game in their role for an identical length of time. Players in generation t are allowed to see the history of the game played by all (or some subset) of the generations who played it before them and can communicate with their successors in generation $t+1$ and advise them on how they should behave.

What we find is that word-of-mouth social learning (in the form of advice from parents to children) can be a strong force in the creation of social conventions, far stronger than the type of learning subjects seem capable of doing simply by learning the lessons of history without the guidance offered by such advice.

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