History, Expectations, and Leadership in the Evolution of Cooperation*

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Abstract

We study the evolution of the social norm of "cooperation" in a dynamic environment. Each agent lives for two periods and interacts with agents from the previous and next generations via a coordination game. "History" matters because agents only receive noisy information about the play of the previous generation and their interpretation of these signals is shaped by history. We characterize the conditions under which history completely drives equilibrium play, leading to a social norm of high or low cooperation. The impact of history is potentially countered by "prominent" agents, whose actions are more visible (in our baseline model, observed by all future agents), and who can leverage their greater visibility to influence expectations of other agents and overturn social norms of low cooperation. We show that in equilibria that are not completely driven by history, there is a pattern of "reversion" whereby play starting with high (low) cooperation reverts toward lower (higher) cooperation.

Work in Progress. Comments Welcome.

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