

Review of *The Grammar of Society: The Nature and Dynamics of Social Norms*
Herbert Gintis

This volume is Cristina Bicchieri's follow-up to her brilliant 1993 book, "Rationality and Coordination." In that book, Bicchieri correctly identified the central weakness of classical game theory as its inadequate theory of how individuals acquire and transform their beliefs. A commonality of beliefs ("common priors") is a precondition for the attainment of a Nash equilibrium by rational agents, yet the classical theory has no model at all of belief acquisition. In that volume Bicchieri made a valiant attempt at providing such a theory, but her model applies to only a few simple forms of strategic interaction.

In this volume, Bicchieri abandons individual learning in favor of social norms as a basis for the commonality of beliefs. Bicchieri distinguishes between social norms, conventions, and "descriptive norms," but her analysis actually applies to all. An unexamined assumption in this book is that social norms must involve altruism or other forms of other-regarding preferences. But, in fact, nothing in the book depends on this distinction. Indeed, Bicchieri develops in some detail the behavioral game theoretic models of altruistic cooperation and punishment. With these in place, it does not matter whether social norms are self- or other-regarding.

Bicchieri argues that social norms create a commonality of beliefs because they are "embedded in scripts," by which she means that there are social cues that inform all players what the "appropriate" norm is for a given social situation. I believe she is quite correct in this insight. Social norms are not merely Nash equilibria--they are highly choreographed affairs based on individuals' in-depth knowledge of social cues.

At least since Schelling (1960) and Lewis (1969), social theorists have interpreted social norms and conventions as Nash equilibria. More recent contributions based upon this key idea include Ken Binmore's *Natural Justice* (2005). This idea helps explain much about social norms and conventions, but it carries with it all of the defects of the Nash equilibrium concept. The treatment of social norms as Nash equilibria misses one key point about social norms: they are real social institutions that can have causal efficacy, and in particular can serve as coordinating devices. This contrasts sharply with the Nash equilibrium concept, which is a description of a state of affairs without material instantiation. Social norms are affirmed and fostered, learned and taught, and can be described empirically without recourse to game theory at all. Every known society has a multitude of social norms and conventions that apply to the coordination of social affairs, and are in effect the material cause of coordinated human actions.

Bicchieri explores with great insight the implications of behavior game theory and experimental economics for a model of the interaction of social norms and Bayesian rationality. This should provide a rich mine of ideas for researchers interested in the formal modeling of epistemic and evolutionary social theory.