



Review: [Untitled]

Reviewed Work(s):

Behavioral Game Theory: Experiments in Strategic Interaction by Colin F. Camerer
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Economics, Governance and Law, Cheltenham: Edward Elgar, pp. 81–94; and “An Essay on the Unmagic of Norms and Rules and of Markets,” *idem*, pp. 95–102). (Hayek’s quest for an impregnable propaganda for his conception of economic freedom thus led him to an impressive social theory but one not uniquely dispositive of normative policy questions.) Hayek rejects constructivism but his work is readily seen to have a constructivist agenda.

No simple unequivocal solutions can be given to numerous issues of Hayek interpretation, including when Hayek’s positions on policy issues follow unequivocally from his theory(ies) and in what sense Hayek is a liberal, conservative, or libertarian—though Hayek’s social theory surely represents one interpretation of Classical liberalism (the Benthamite and Ricardian Right) and one variety of conservatism. His theories are laden with *selectively perceived* 1) “artificial” mechanisms and institutions, and 2) unintended negative consequences of interference with markets—whereas all institutions have deliberative elements and markets depend on law *ab initio*.

Caldwell’s analyses are deeply informed, objective and judicious. His interpretive contributions typically make sense. He is able, mostly, to hold Hayek at arm’s length.

On the issues and positions that Hayek shared with Milton Friedman and George Stigler, for example, Hayek is by far the deeper thinker. The economist closest, intellectually, to Hayek is James Buchanan. Yet their exchange of claims (mentioned but not directly explored by Caldwell) as to who is or is not a constructivist is driven by both a mistaken drive for ideological purity and conclusiveness and an understandable egoism. Each is, in his own way, a constructivist and pragmatist. If I had had the opportunity, I would have posed a question similar to one I once posed to Buchanan: Would you hold the same methodological and substantive positions if you resided in a Marxist society—or, now, in an Islamic one?

Hayek’s sociopolitical theory ultimately rests on the principle of the rule of law. Caldwell includes the principle in his discussion, but renders no critique of it, though its importance warrants one (compare Samuels, “The Rule of Law and the Capture and Use of Government in a World of Inequality,” *ibid*, pp. 61–80).

The book is highly recommended to a variety of readers both for its substantive content and for Caldwell’s penetrating and perceptive biographical style.

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C Mathematical and Quantitative Methods

Behavioral Game Theory: Experiments in Strategic Interaction. By Colin F. Camerer. Princeton: Princeton University Press, New York: Russell Sage Foundation, 2003. Pp. xv, 550. \$65.00. ISBN 0–691–09039–4.

JEL 2003–0871

This book provides an overview of the emerging synthesis of game theory with experimental economics. In many ways, game theory is an ideal tool for the empirical investigation of social interaction conducted in the lab. The precise mathematical language of game theory admits sharp manipulations, playing to the control which is the strength of laboratory study. The interaction between game theory and the lab has been steadily picking up speed for the last couple of decades. Early on, experimental studies focused primarily on testing theories based on axioms of rational behavior. In the past few years, theories constructed to explain and extend the findings of experimental studies have themselves become the focus of much of the testing. The fascinating interaction between laboratory insight and theory is at the heart of this book.

The book is organized along lines that will be familiar to any student of the field, with chapters on dictator, ultimatum and trust games; mixed-strategy play; bargaining; dominance-solvable games; learning; coordination games; and signaling and reputation games, among others. The term “behavioral game theory” is intended to remind the reader of the focus on predicting actual behavior, and to emphasize the role that psychology has in doing so. The book covers recent models of social preference (i.e., fairness and reciprocity), models of iterated reasoning (i.e., “I think that you think....”), and models of learning about strategic behavior.

Camerer writes well, in a breezy but informative style. There is enough detail to satisfy the specialist, but the explanations are cogent

enough to be understood by scholars and graduate students in tangentially related disciplines. The referencing is comprehensive and up-to-date. In every chapter, enough of the studies are discussed in detail to provide outsiders with a good feel for how this work is conducted. A useful "Design Details" appendix describes the laboratory protocols of select studies. This is one of the first books to bring together the various models that experimental data has given birth to, and most are laid out in some detail. Given these strengths, the book will be a handy reference manual.

Where the book is somewhat less satisfying is with regard to discussions of how the theories relate to the data. This is a rapidly evolving area, with its share of controversy over the best modeling approach. Camerer, to his credit, makes no bones about his predilections, laying them out at the end of chapters. But readers who are novices to the field would benefit from a more thorough discussion of the counterpoints to the views presented. After all, the vetting of counterexamples to the conventional wisdom not only started the whole venture of behavioral game theory but still drives the shape of modeling and testing in the field. To give an example, Camerer indicates that he prefers reciprocity ("I reciprocate kindness") over inequality aversion ("I want a fair distribution") versions of social preference models because the former "get the psychology right." But, in fact, the evidence presented in the discussion that precedes this statement is quite mixed. For instance, a well known ultimatum game experiment found that offers drawn at random elicit less rejection behavior than those proffered by actual players, as the critical role of intentions in reciprocity models implies. But the same experiment found that proposals made by a third party make little difference in rejection rates, thereby punishing a player who had shown no ill intent. While at present, no model provides a satisfactory explanation of this experiment, there are several tentative hypotheses out there implying quite different things about the psychology of social preference, ranging from the right definition of intentions to peoples' perception of fair procedure. It is unfortunate that the book does not delve into some of these possibilities since they concern one of the most exciting debates in the field.

Camerer indicates that, in his view, the main argument in favor of inequality aversion models

is their analytical simplicity. But the relative strengths of social preference models with regard to testability are largely left unexplored. Inequality aversion models make quite precise predictions that are easily taken to the data. Taking reciprocity models to the data, in contrast, often requires estimates of the difficult to measure—such as beliefs-about-other-player-beliefs—to resolve otherwise multiple equilibria. This is an important issue for the future development of theory not only in this area but also in other areas such as learning.

Camerer has done quite a bit of work on the EWA (experience-weighted attraction) learning model, and the chapter devoted to learning has a good deal of interesting material on that work. But some of the common criticisms of the approach are given but a little attention. For instance, most incarnations of EWA involve more free parameters than do competitor models that focus solely on reinforcement or belief learning. The author notes that many theorists find EWA "too complicated" in spite of its predictive success, an assessment he puts down to "historical convention." But of course, theorists have given a good deal of thought to the value of parsimony in a theory, both as it relates to clarity of insight and to the likely value of a model as a general predictive instrument. The discussion in the book would benefit from addressing these points.

That said, the book ends on a high note, with an interesting list of open research questions (i.e., Can experiments sharpen the designs of new institutions? How do teams, groups and firms play games?). The list reflects both the long distance the field has come, and the promising terrain yet to be explored.

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Handbook of Econometrics. Volume 5. Edited by James J. Heckman and Edward Leamer. Amsterdam; London and New York: Elsevier Science, North-Holland, 2001. Pp. xxii, 744. \$134.00. ISBN 0-444-82340-9. *JEL* 2002-0887

Volume 5 of the *Handbook of Econometrics* continues in the tradition of previous volumes by presenting chapters on topics in which work has advanced considerably in previous years. The chapters are divided into three groups. The theoretical econometrics part includes a chapter on the bootstrap by Joel L. Horowitz, a chapter on