

Behavioral Game Theory, Colin F. Camerer, 2003, Russell Sage Foundation, New York, New York/Princeton University Press, Princeton, New Jersey, hardcover, 544 pages, ISBN:0691090394, \$65.00

Here is our list of top ten reasons to buy this book:¹

10. *Because it's an eminently readable book.*

It's not just the occasional quip that makes the book fun to read. Camerer is an engaging writer who knows how to avoid unnecessary formalism and jargon and who still manages to be precise and to the point. He also made the fortunate decision to build his narrative on detailed summaries of path-breaking articles, which he often enriches with Tables that succinctly summarize numerous related experiments. This modus operandi makes for a nicely flowing narrative that is relatively easy to follow.

9. *Because it provides the benchmark for Behavioral Game Theory (BGT).*

In Camerer's view, canonical game theory (Game Theory) is not living up to its potential since it ignores considerable evidence that people often do not act in accordance with canonical models, which do not account for cognitive limits and social preferences. Says Camerer, "This book is a long answer to a question game theory students often ask: 'This theory is interesting ... but do people actually play this way?'" As he makes clear, "the goal is not to 'disprove' game theory (a common reaction of psychologists and sociologists) but to *improve* it by establishing regularity, which inspires new theory." (Pp. 20/21) Correspondingly, throughout the book Camerer's method is to review dozens of experiments, to identify behavioral regularities that can be extracted from them, and then to confront these regularities with the sharp predictions of canonical game theory. These models are not the kind of game theory proposed by McKelvey & Palfrey (1995, 1998) or Goeree & Holt (2001), i.e., models that acknowledge that people might react to the potentially asymmetric costs of deviating from a normative solution, or to errors, or to systematic deviations, in other people's behavior. In this sense, we believe that Camerer and BGT attack something of a strawman. That said, Game Theory is a fair target as it still provides the models in the prevalent graduate textbooks (Kreps 1990, Mas-Collel, Whinston & Green 1995).

8. *Because the book covers an amazingly wide range of topics.*

Among the topics covered are dictator, ultimatum, and trust games (chapter 2), mixed strategy equilibrium (chapter 3), bargaining (chapter 4), dominance solvable games (chapter 5), learning (chapter 6), coordination (chapter 7), and signaling and reputation (chapter 8). Camerer's choice of topics seems motivated by his own contributions to BGT, as well as by what is out there already in useful contributions in other areas (e.g., public goods, industrial organization, and experimental asset markets). The self-imposed restriction reflected in the subtitle – "experiments in strategic interaction" -- dictated the exclusion of individual decision making of which a number of useful surveys also exist elsewhere (e.g., Camerer 1995; Starmer 2000). Plus, there are areas such as double auctions where canonical game theory seems to work reasonably well. Nor does the book cover field experiments (e.g., Harrison & List 2004; Carpenter, Harrison & List

¹ "Lists are compact, useful, good, and irresistible; so here's one." (Camerer 2003, p. 473)

2004) although there is in chapter 2 an extended discussion of a recent set of somewhat controversial experiments by anthropologists.

7. Because it was written by one of the leading contributors to BGT.

Writing (text) books is not the kind of activity that typically gets rewarded in economics. Clearly, Camerer wrote this book in anticipation of creating a landmark book similar to those by Davis & Holt (1995) or Kagel & Roth (1995). We are confident that his gamble will pay off handsomely (if not in money than certainly in the adulation of his peers).

6. Because its author gives the reader a glimpse of the fascinating conceptual and theoretical developments at the intersection of economics and psychology, much of it produced through experimental work in these two disciplines. Take for example, his concise and very useful discussion of theories of social preferences that concludes his extensive review of dictator, ultimatum, and trust game experiments. There is no better source that we can think of that provides an equally effective and balanced primer of such theories. (That said, this discussion would have been even more persuasive had it addressed the question of where social preferences come from, and whether indeed people bring into the laboratory the rules of thumb that they learn in the repeated strategic interactions of daily life.)

5. Because the author pays unusual, and in our view exemplary, attention to procedural detail. In contrast to some of his behavioralist colleagues, Camerer is well aware of the Duhem-Quine problem that every experimental test of a theory is inevitably a joint test of theory and an experiment's design and implementation. In Camerer's words, "The way in which an experiment is conducted is unbelievably important." (p. 34) Throughout the text one finds whole methodological sections and frequent methodological comments. There is even an appendix on design details of many of the papers that are reviewed in the book. More fundamentally, in order to understand which and why experimental results are sensitive to methodological variables (differences in stakes or subject pools, deliberate as well as unwanted nuances in experimental design, differences in social context, and learning/experience effects), Camerer often digs deep into specific areas of experimental research. Thus he implicitly informs the reader about the robustness as well as external validity of experimental results, approaching the data in much the same way that econometricians treat data from the field: to gain insights about "consistency" and "efficiency" of experimental results, Camerer pays close attention to the sources and to the range of their variation (which, unlike for data from the field, can mostly be readily observed experimentally). By doing so he frequently points out that robust comparisons across (randomized) treatments are missing, inspiring new directions of experimental research. Especially when it gets to cross-cultural comparisons of results, he is aware of the problematic methodological issues concerning stakes, language, experimenter effects, and cultural confounds. (Camerer is, however, curiously coy on the question as to what extent these methodological issues affected the cross-cultural results that he discusses at length on pages 68 – 74; see his cryptic remark on p. 474.)

4. Because of Camerer's Top Ten Open Research Questions.

Lists, as we know, are compact, useful, and irresistible, and so is this one. On pages 473 – 476, Camerer goes out on a limb and proposes what he considers the most interesting research questions for the years to come. Not surprisingly, half of these questions touch on areas that have been on Camerer's agenda. Also not surprisingly, several of the questions touch on the big undercurrents running through his book: the desirability of a better understanding of the cognitive foundations of strategic interaction (How do people learn? What happens when people confront "new games"? How exactly are people thinking in games? What game do people think they are playing? How do teams, groups, and firms play games?) and the desirability of a better understanding of the social facets of preferences (How do people value the payoffs of others? How do social preferences vary across people and environments? How do socio-cognitive dimensions influence behavior in games?). It's a list about which everyone will have her or his opinion. That said, those betting that Camerer misses the mark are betting against a superb track record.

3. Because Camerer has somehow managed to write a book that can be read both by more seasoned researchers and by students who are early in their career.

We know from our own experience that Camerer's book is an excellent complement for courses based on standard graduate books, both for teachers and students. We pity those graduate students who have to make do with dinosaurs such as Mas-Collel, Whinston & Green (1995). And the value of the book for researchers at more advanced stages should be clear after everything said.

2. Because there is no reason not to buy the book (given a minimum interest in the topic and one is not severely cash-constrained). Camerer's book will for a predictable time become the bible of those that do BGT, and even of those unapologetic believers in the rational actor paradigm, as at least one of us is.

1. Because the more people buy the book, the more likely will we see an updated version of this book before long. A series of continuous updates would create a most fascinating contribution to the history of both game theory and experimental economics. In this way we could trace the convergence to a Game Theory that can do without the qualifier Behavioral.

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