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Review Essay

"Behavioral Economics Comes of Age"
Review of: M. Altman (Ed.), Handbook of Contemporary
Behavioral Economics: Foundations and Developments. M.E.
Sharpe, Armonk, NY (2006). 762 pp., Price:
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It is essential to keep in mind that behavioral economics is a relatively new discipline compared to its academic relatives. Born in the 1970s and early 1980s (although its origins can be traced back much further), in anthropomorphic terms behavioral economics has survived a childhood in which its prospects, and even its survival, were uncertain; it passed through an adolescence subject to all the angst and search for identity common to that stage of life; and in the past decade it has emerged into young adulthood, healthy, strong and still growing. As an academic sub-discipline, behavioral economics has reached a point where it regularly receives mention in the popular mainstream press such as The Economist – in quite laudatory terms – and enjoys frequent citation in books and articles both in economics outlets as well as publications in other disciplines. Behavioral economics is no longer hidden in a dark corner of the disciplinary closet of economics, as was arguably the case prior to the 1980s. In 1984 the first conference on behavioral economics was held under the auspices of the Society for the Advancement of Behavioral Economics at Princeton University. I had the pleasure to attend that conference, which I found both exciting and at the same time perplexing. Exactly what was behavioral economics, other than a critique of mainstream neoclassical economics? At the fourth annual conference, held at San Diego State University in 1988, a newly minted Ph.D. in economics casually remarked to me that, as a self-described post-Keynesian she really had no idea what behavioral economics was about—a sentiment that I, coming from a background in sociology, admitted that I shared to some extent. But, she hastened to add, whatever behavioral economics was, it seemed very interesting (a sentiment I enthusiastically shared). Indeed, much time and effort at the first few conferences, and more generally during the formative years of behavioral economics, was devoted to educating an interested but largely uninformed audience about what behavioral economics was and what it was not.

Thankfully, the need for such introductory information is no longer needed since behavioral economics has progressed to the point where little or no additional explanation is required. Certainly, the Nobel Prize awarded to Daniel Kahneman in 2002 helped by thrusting behavioral economics into the international limelight (Amos Tversky, Kahneman's longtime collaborator, would surely have shared in the prize had he not died prematurely; as it was, Vernon Smith, whose work in experimental economics also occupies an important place in the development of behavioral economics shared the 2002 prize). However, as important as Kahneman's work has been to behavioral economics, it

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comprises only one aspect of a much larger and richer intellectual project that describes behavioral economics today. Over the past half-century or so behavioral economics emerged from a focused, one might even say narrow, critique of neoclassical conceptions of rationality to a much broader agenda of perspectives, topics, and methodologies. As it has refined and broadened the scope of its concerns, behavioral economics has inspired work in other areas, including socio-economics, and has attracted the interest of scholars outside the core disciplines of economics and the decision sciences.

The publication of the *Handbook of Contemporary Behavioral Economics: Foundations and Developments*, edited by Morris Altman, marks an important milestone in the development of this robust but still quite young discipline. By way of historical footnote, this is not the first book to lay claim to "handbook" status in behavioral economics. Stanley Kaish and Benjamin Gilad edited a series of five volumes, published between 1986 and 1991, under the general title *Handbook of Behavioral Economics* (Greenwich, Connecticut: JAI Press). Morris Altman's present edited volume differs from these earlier volumes in several important respects: first, it has a thematic organization that is more deliberate, logical, and effective than the earlier handbooks; second, it strikes a better balance between topics of interest to economists and readers from other disciplinary backgrounds; and third, and perhaps most important, it is more self-assured and forward looking, reflecting the more secure position behavioral economics occupies today as compared to 20 years ago. The original papers Altman has collected for this handbook, in addition to the editor's introduction, convey the clear message that behavioral economics is not only here to stay, but also that it holds great promise to augment economic knowledge as much (or more) than simply offering a critique of neoclassical economics. Moreover, Altman's edited volume draws strength both from a creative and well-conceived selection of articles – 36 in all – and even more from the larger pool of research and knowledge that has emerged during the formative years of behavioral economics and which has resulted in a vibrant, growing sub-discipline.

Altman's edited volume is organized into nine sections, each containing from two to six articles grouped according to broadly similar concerns; the sections progress (approximately) from micro-level to macro-level topics, yielding a further level of coherence to the organization of the volume. In addition, the editor provides an informative introduction that lays out the critical underlying assumptions that were employed in designing the handbook. These assumptions run the gamut from the axiomatic and canonical (e.g., "Assumptions matter substantively for causal and predictive analysis"), through succinct summaries of some of the core principles of behavioral economics (e.g., "Deviations from conventional norms, . . ., need not demonstrate irrationality in decision making"), to forward-looking statements concerning how work in behavioral economics can and will relate to conventional theory (e.g., "Behavioral economics demonstrates not that individuals are insensitive to price and real income but that other variables can be of critical importance"). The editor's introduction also provides a concise summary of how these guiding assumptions emerged through the seminal contributions of the "pioneers" of behavioral economics, such as George Akerlof, Richard Cyert. Harvey Leibenstein, James March, Herbert Simon, and Vernon Smith. Interestingly, Altman lists Kahneman and Tversky (as well as Gerd Gigirenzer) as behavioral economic "fellow travelers"—perhaps because they are the first and foremost regarded as experimental psychologists, and only secondarily as economic psychologists.

Part 1, "Inside the Economic Agent," consists of six articles dealing with one or another aspect of what "economic man" is all about. The lead-off article by Paul Albanese peers into the "black box" of individual decision making and consumer behavior by employing psychological theories of personality, through which he intends to broaden the behavioral foundations of economic theory and analysis. Albanese's analysis demonstrates the limitations of excluding neurotic, narcissistic, and other commonly found psychopathologies from economic analysis. Albanese shows that individual psychology is not easily (or fruitfully) divided between that which is fully rational and all the rest, which is conventionally dismissed as irrational.

In Chapter 2, Gerald Cory delves even deeper into the role of neuro-psychology by exploring evolutionary neuro-science and physiology of decision making. This innovative approach attempts to account for the evolution of market exchange based on the dynamics of neural architecture. Cory's approach is rigorous and mathematical, and although it is impossible to provide an adequate summary here, suffice it to say that the neuro-scientific perspective offers a much richer and completing explanation of, for example, altruistic behavior based on mutual exchange.

Chapter 3, by Roger Frantz, addresses the role of intuition in economic behavior. Distinguishing between four broad types of intuition, Frantz makes a persuasive case for their inclusion as significant factors in many kinds of decisions: for example, decisions made under uncertainty, as an adjunct to reason and as an essential component of heuristics. From a behavioral economic standpoint Frantz's message is that a model of decision making will be less useful and accurate to the extent that it excludes factors that can be demonstrated to affect behavioral outcomes: in the case

of intuition these include subtle awareness or flashes of insight, things we "know" naturally without quite knowing how we know them. Frantz concludes, not entirely tongue in cheek, that "the importance of, ..., intuition should be intuitively obvious to the casual observer" (p. 63).

David George's and Bruce Kauffman's papers, in Chapters 4 and 5 respectively, further develop the general argument that psychology matters in economic behavior. George focuses on developing a fuller understanding of how people really think through problems and choices, through deep, often convoluted introspection rather than a simple calculus of cost and benefit. Kaufman adds to this an attempt to integrate emotions into economic theory. He lays out a behavioral utility maximization that introduces "environment" as a co-equal to the "self" in working through decisions to maximize utility. His explicit goal is to bring "emotions (back) into economics" (p. 82).

Part 1 concludes with Chapter 6 by Gary Lynne, which deals with the "black box" of the self by deconstructing it into smaller units of "subselves." Lynne pursues a metaeconomic approach to understanding how individuals define themselves, their interests, and choices. The first section of the paper lays out the main thesis, which is then developed analytically and mathematically in the second half of the chapter.

Part 2 deals with "Context and Modeling," composed of seven articles that range broadly from sophisticated theoretical discussion of economic theory and public policy, in the analysis of group selection and organizational and personal capital. Morris Altman's chapter begins Part 2 with an extensive discussion of the implications of introducing the assumption of effort discretion at the level of both individual and firm behavior. Altman's discussion draws upon earlier work of behavioral economists Leibenstein and Akerlof on efficiency wage and *x*-efficiency theories. Altman makes a strong case for broadening the concept of rationality rather than invoking irrationality as an explanation. He makes a convincing case that introducing effort discretion into the modeling of economic behavior fundamentally alters the way in which employment, real wages, productivity, unit cost, and competitiveness can be analyzed and understood. Altman develops his thesis by largely rejecting earlier behavioral economic explanations based on irrationality or errors and biases of actors. In doing so, Altman demonstrates how behavioral economics is continuing to evolve by subjecting its assumptions and theoretical formulations to continual tests, thereby refining and improving its core concepts and tenets.

Chapter 8, by Alexander J. Field, tackles the provocative question of how Darwinian ideas about natural selection might be incorporated into the behavioral economic analysis of self-interest and group selection. Beginning with a discussion of the uses and limits of game-theoretic approaches such as the prisoner's dilemma, Field attempts to move beyond the intellectual standoff between assumptions of selfish rational choice, on the one hand, or group-oriented pro-social behavior, on the other hand. Some degree of reconciliation, he concludes, can be attained by the introduction of evolutionary forces and the biological programming that this has produced in humans over the long-term.

In Chapter 9, Alan James MacFadyen makes the case for the centrality of belief systems in the study of economics. MacFadyen's treatment of belief systems goes beyond conventional notions of beliefs as a relatively fixed set of ideas; instead he posits a model that is complex, dynamic, and in important ways not fully knowable at the conscious level. As is the case for most behavioral economists, the author's overarching goal is to provide an analytical framework that better represents the reality of economic cognition and behavior, as opposed to the simpler, reductive model found in neoclassical formulations. This is, of course, a central point of behavioral economics, but the good news is that it is increasingly gaining influence in mainstream economics. MacFadyen concludes with a pithy quote from Rabin, to the effect that conventional economists appear increasingly willing to recognize that "the more realistic our assumptions about economic actors, the better our economics" (p. 196).

Chapter 10, by Shlomo Maital, focuses on the ethical foundations of capitalism. Maital's main goal is to reclaim "moral sentiments" as a core concern of economics—a reference, of course, to Adam Smith, whose foundational writings provided two apparently contradictory depictions of human motivation. Basing his discussion around the various cracks that appear to be showing in the foundations of contemporary capitalism (e.g., growing inequality, sterile materialism, etc.) Maital argues convincingly that moral sentiments and ethics are, and have always been, essential to the successful functioning of economic systems. For example, whatever the attractions of wealth, there is a growing body of evidence that it does not buy happiness. Maital maintains that were he alive today, "Adam Smith would be a behavioral economist. In his time, he was" (p. 214).

In Chapter 11, Jörg Rieskamp, Ralph Hertwig, and Peter M. Todd address the question of bounded rationality from two psychological perspectives. The first, based on the heuristics and biases program, conforms to classical rationality and views people as essentially irrational because they routinely deviate from normative standards of rationality. The second view of bounded rationality emphasizes the "fast and frugal heuristics program" (p. 232), which rejects the

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idea of unequivocal norms and instead holds that the best thing, the only thing, people can do under limited cognitive and informational conditions is to strive toward environmentally adaptive decisions.

Kevin Sontheimer takes on the question of whether or not behavioral economics represents a true paradigm shift in Chapter 12. He characterizes behavioral microeconomics as a generalization of the neoclassical framework rather than a radical departure from it. According to this line of argument, the differences between behavioral economics and neoclassical economics reside mostly in emphasis and degree: behavioral economists tend be more empirical than neoclassical economists, and prefer procedural conceptions of rationality over substantive rationality. Thus, instead of a pitched battle between warring schools of thought, Sontheimer contends that "a graceful integration of the two schools of thought ought to take place" (p. 238).

Chapter 13, by John F. Tomer, deals with the role of *intangible* capital in the functioning and growth of the economy. He argues that the conventional concept of "capital" is too narrow, and overlooks various characteristics of organizations and relationships that are difficult to measure but which constitute important sources of capital. Tomer emphasizes that the modeling of the firm as well as the behavior of the individual economic actor in neoclassical economics has suffered as a result of the exclusion of key variables, from organizational culture to trust among individuals, that exert profound influence on economic phenomena. He suggests that the inclusion of these factors as types of intangible capital would improve not only economic theory, but would also have significant implications for improving the performance of firms and, more generally, productivity in the economy.

Part 3, "Decision Making," contains five papers on various aspects of choice formation and behavioral outcomes. Although coming from a variety of perspectives and focusing on different types of decisions, the authors share a common purpose of improving the understanding how decisions are made in reality—as opposed to how they are made under narrow, restrictive conditions imposed by conventional economic theory. In Chapter 14, Stephen Lea tackles this question by drawing comparisons between behavioral economics and behavioral ecology. Lea suggests that the economic concept of rationality can be improved by the ecological concept of optimality. Using examples of foraging, hoarding and saving, and the psychology of money Lea sheds light on how it might be possible to develop an integrated paradigm that is not reductive.

Chapter 15, by Ellen K. Nyhus and Paul Webley, explores the implications of time preference and self-control for savings behavior. Their analysis draws upon the psychological processes that influence intertemporal decisions, relying both on empirical research on time preferences and innovative perspectives such as hyperbolic discounting. This approach clearly extends and enriches the study of savings found in the mainstream economics literature more than it represents a departure from it. They conclude by suggesting that time preferences and future orientation are key theoretical variables, albeit difficult to integrate into formal theory.

Peter Lunt addresses the role of cultural theory in relation to rational choice in Chapter 16. Building upon work of sociologists James Coleman, Pierre Bourdieu, and others, and juxtaposing these efforts to Gary Becker's social economic theory, Lunt extends the analysis of rationality to the socio-cultural level, emphasizing the importance of placing economic behavior in a broader field of forces.

Chapter 17, by Mark Pingle, focuses on deliberation cost as a foundation for behavioral economics. In a short but technically sophisticated discussion, he concludes that the rational choice model can be improved and rendered less ad hoc. He asserts that deliberation cost can be used either on its own or in a social context, and can help to explain such varied phenomena as socialization and organization.

Part 3 concludes with Chapter 18, by Hugh Schwartz, on the value of in-depth interviewing in achieving a better understanding of economic reasoning. Drawing upon examples of previous research, Schwartz lays out a persuasive case for digging down into the deep structure of individual thinking to reveal ways in which current theoretical assumptions are "manifestly poor indicators of the reasoning processes that underlie decision making" (p. 373). In addition, he suggests that in-depth interviewing, although relatively costly and time-consuming, can yield a host of other benefits, from generating new hypotheses to identifying ways to improve actual decision making.

Part 4 consists of four articles on "Experiments and Implications." In Chapter 19, Gerrit Atonides, Fergus Bolger, and Ger Trip provide an extensive account of classroom experiments, demonstrating how this method can yield important empirical findings relevant to behavioral economics: for example, classroom experiments imply that behavior "may be, and frequently is, different from what standard economic theory would predict" (p. 400). Similar conclusions are offered by Werner Güth and Andreas Ortmann, in Chapter 20, and by Jack L. Knetch and Fang-Fang Tang, in Chapter 21. With respect to distribution and bargaining, Güth and Ortmann note that, contrary to the assumptions of the conventional rational choice approach, in real life situations actors often lack crucial information about "decisive

decision alternatives" and how the latter should be evaluated. Using data collected in different national and cultural settings, Knetch and Tang focus attention on the importance of context (or reference) as influences on the stability of preferences. Indeed, they conclude that stable preferences, as conventionally understood, do not really exist. Robert J. Oxoby concludes Part 4 with Chapter 22, consisting of a methodological discussion of various aspects of validity in behavioral economics experiments.

Part 5 consists of two chapters related to "Labor-Related Issues." In Chapter 23, Nathan Berg surveys the emerging field of behavioral labor economics. Beginning with the question why conventional labor economics has been slow to adopt elements of behavioral theory, Berg concludes that the boundary between the two fields is blurred, and that behavioral labor economics is pursuing a path of generalizing rather than rejecting the neoclassical approach. Similarly, Lonnie Golden, in Chapter 24, focuses on the question of labor supply by "expanding the conventional economic model of hours of labor incorporating various behavioral and social sources of constraints" (p. 479). As is often the case, the relationship of behavioral labor economics to conventional economics turns out to be complementary and evolutionary rather than contradictory or revolutionary.

Chapters 25 and 26, authored respectively by Nancy Folbre, and Erich Kirchler and Eva Hoffman, make up Part 6, "Gender and Decision Making." Using ecological and game theoretic approaches, Folbre offers explanations for the emergence of patriarchal institutions as well as possible solutions to increasing women's bargaining power. Kirchler and Hofmann consider the narrower but more common problem of the role of gender in household economic decisions. They find that economic decisions in households are surprisingly complex, with multiple types of cross-linking to prior experiences and events, and the impact of social norms and individuals' roles in the family. Such complexity demands more attention to empirical research and the introduction of additional variables, including social and behavioral factors, into microeconomic modeling.

Part 7, "Life and Death," consists of two articles that take up issues more commonly the province of psychology and sociology than economics. Curiously, despite the subject matter, the articles in this section depart the least from the conventional economic approach: it is the topics they address that fit them into behavioral economics. In Chapter 27, Bijou Yang and David Lester explore various ways in which suicide can be usefully analyzed using the tools of rational choice. In most respects their treatment of the subject matter does not depart from the standard rational choice paradigm, although in the concluding section they acknowledge how economic analysis might be integrated with sociological and psychological theories of suicide. Gideon Yaniv's discussion of health-compromising behavior follows a similarly conventional economic line of analysis, arguing that even non-rational behaviors such as smoking, overeating, agoraphobia, and insomnia respond to economic incentives—a conclusion I suspect even the most rigid adherent to neoclassical economics would likely agree with.

In Part 8, three papers explore the behavioral economic dimensions of taxation, ethical investing, and tipping. In Chapter 29, Simon James lays out the ways in which behavioral economics can contribute to the study of tax behavior. Noting that the neoclassical approach to tax compliance employs a rather narrow concept of economic rationality. James proposes an expanded model employing variables outside of the conventional paradigm. In such a way he suggests an approach that not only improves the theoretical understanding of tax behavior but which can also lead to improved policies for improving tax compliance. Chapter 30 addresses the relatively recent, but expanding, interest in ethical investing. John Cullis, Philip Jones, and Alan Lewis analyze both the instrumental and intrinsic actors that motivate "ethically aware" investors. They also consider the potential for ethical investing to exert an impact on collective outcomes in financial markets. Given that ethical investing tends to be concentrated among the well-educated middle class, ethical investing is likely to be an area of growing interest to behavioral economists and many others in the years to come. In Chapter 31, Michael Lynn offers a fascinating discussion of tipping behavior around the globe. Lynn draws our attention to behavior that is so common and normative that it is typically taken for granted, but which from a conventional economic perspective make no sense: the voluntary act of leaving a tip in a restaurant one is unlikely ever to visit again. Tipping may not be rational in the narrow sense, but Lynn details the ways in which it follows regular patterns based on the size of the bill, method of payment, and so forth. Tipping behavior, it turns out, is remarkably complex, and is shaped by a large number of factors beyond the simple objective "to insure service." Lynn wryly concludes that "Rational or not, most economists leave tips; it is time they begin to study them as well" (p. 640).

Part 9 concludes the volume with five articles on various aspects of "Development, Behavioral Law, and Money." In Chapter 32 Erik Thornebecke focuses on the long-debated relationship between inequality and economic development. In a balanced discussion of the competing positions, he concludes that there is no simple trade-off as has often been assumed, and he provides evidence of important ways in which mitigating inequality can serve both the practical goals of

development as well as the ethical principle of achieving as much equality as feasible short of deterring entrepreneurial incentives. Chapter 33, by Hamid Hosseni, also considers the preconditions and context of development. Hosseni argues that insufficient social capital is a significant source of underdevelopment. He also argues that social capital needs to be placed on an equal footing with conventional conceptions of physical and human capital in the economic analysis of development. Moreover, he suggests that failures of development are not merely attributable to government interference with market mechanisms; under the right conditions, social capital can serve to facilitate a complementary relationship between governments and markets.

In chapter 34 Thomas S. Ulen addresses the question of how behavioral components can be usefully incorporated into the field of law and economics. Noting that the field has been dominated in the past by narrow conceptions of rationality, which often hold in theory but not in fact, he concludes that an explicitly behavioral economic approach to the study of law, although yet incomplete, can enrich the understanding and improve the analytic models of law and economics.

The two concluding chapters of the book bring a behavioral perspective to the study of money and finance. In Chapter 35, Tobias F. Rötheli provides a concise outline of the elements of behavioral monetary economics. He notes that monetary economics actually has a significant behavioral component that predates the emergence of behavioral economics, such as monetary policy that implicitly relies on a conception of bounded rationality. He emphasizes that expanding this behavioral component in the future, particularly in helping to better understand deviations from rational expectation, will help to improve monetary economics. Thomas Zaleskiewicz, in Chapter 36, applies a similar perspective to behavioral finance. While investors are rational to a degree, Zaleskiewicz documents the various ways in which assumptions of stable preferences and unbiased forecasts about the future, are simply incomplete or unrealistic when applied to actual behavior. Once again, the crucial point made in this article is not that conventional economic theory is completely mistaken, but that it fails mainly by pushing narrow concepts and unrealistic assumptions too far. What is needed to remedy this situation is a good dose of behavioral theory and empirical research.

As comprehensive as this handbook is, it is still not – nor can one reasonably expect it to be – exhaustively encyclopedic in its coverage of behavioral economics. The field has simply grown too large for to be neatly boiled down to a single book. That said, however, there are two broad categories of omission in the handbook worth noting. The first concerns the relationship of the parts to the whole. Although the editor's introduction is very effective in describing the rationale behind the book's organization, as well as in broadly summarizing the connections between thematic layout of the book and works by the "founding fathers" of behavioral economics, the volume might have benefited from requiring all the contributors to draw more specific links between their respective articles and writings of the classic scholars of behavioral economics. As it is, the authors tend to take their own paths in dealing with various substantive topics in behavioral economics, often leaving it to the reader to discern the connections to the broader discipline. In a volume consisting of 36 articles, this relatively open structure can and does lead to a fair amount of variation among the articles in accessibility to non-professional economist readers as well as the natural appeal to a broad audience. For example, the articles on ethical investing (Chapter 30) and tipping in restaurants around the globe (Chapter 31) will likely appeal to anyone who has ever invested money or pondered how much of a tip to leave after dining out in an unfamiliar place—which is to say, virtually everyone. Similarly, the articles on gender and economic roles, and gender and decision-making (Chapters 25 and 26) are both accessible and of obvious concern to any reader who has dealt with or thought about patriarchy in its institutional or interactionist manifestations. On the other hand, other articles will be of interest only to professional economists with a specific theoretical or substantive concern. If the lack of uniformity imposed on contributors to the handbook comes at some expense to tight focus and seamless continuity, the diverse offerings contained in the volume compensate by offering a rich and varied menu. This is a hefty book, and one if its notable strengths is that it offers something for nearly everyone.

The second omission – one that is perhaps inevitable and may even be purposeful – concerns the absence of contributors from disciplines other than economics and psychology. I say "inevitable" because behavioral economics has often been characterized as the attempt to reconcile economic theory and psychological reality. This is, in fact, how the discipline is frequently perceived today. However, as one who is neither an economist per se nor a psychologist, I see ample opportunities for theory and empirical research drawn broadly from other social science disciplines that might further enrich the behavioral economic perspective. However, there is also some advantage in sticking to the core disciplines of economics and psychology, particularly in attempting to assemble articles into a "handbook." The hypothetical possibilities for intellectual cross-pollination constitute both the promise and curse of interdisciplinary research: narrowing the field of participants too restrictively invites complaints from those who may feel excluded; yet

opening the doors wide and inviting everyone in risks courting the perception that there is no core, no central defining purpose, to the enterprise. Given the maturing but still-emergent status of behavioral economics, the editor's decision to limit contributions to economists and psychologists is, at minimum, reasonable.

This book will be of interest to economists at the graduate or post-graduate level who have an interest in peering beyond the narrow assumptions and theoretical constraints of classical and neo-classical economic theory. This is especially the case for economists who are already aware or who suspect that there is more to economic theory – and to understanding the complicated real world circumstances humans inhabit – than is "dreamt of" in the dominant "philosophy" of contemporary economics. In addition, because the articles selected for inclusion are for the most part accessible to non-economists, this volume should also be of interest to social and behavioral scientists from a range of disciplines, including psychology and the decision sciences, sociology, political science, and business administration—in short, anyone who is likely to be a reader of *The Journal of Socio-Economics*.

As noted above, publication of the *Handbook of Contemporary Behavioral Economics* marks an important milestone in the development of behavioral economics. As a sub-discipline behavioral economics has evolved over the years: first seeking to critique neoclassical economics, then seeking to distance itself from mainstream economics (at times adopting a nearly secessionist position), defending itself against predictable counterattacks, and finally moving toward a less defensive and more cooperative stance. In retrospect behavioral economics appears to have carved out a path of scientific evolution rather than revolution, although active debate over this point continues to the present day—at times even within the pages of this handbook. However, it remains a valid conclusion that contemporary behavioral economics has evolved in a direction that does not reject the dominant economic perspective in its entirety. Thus, the relationship of behavioral economics to classical and neo-classical economics is thus not that of Copernicus to Ptolemy. The moment the geo-centric model was shown to be wrong, it ceased to have any scientific value whatsoever. In contrast, as behavioral economics has developed it has added to the extant dominant paradigm, forcing it to confront some of it shortcomings and errors as well as suggesting ways in which a more comprehensive approach is needed—an approach that will yield superior results. What can be observed here is more akin to the relationship between Newtonian mechanics and Einstein's theory of relativity: Newton's classic formulations on gravity and the movement of heavenly bodies still have great value and work well for certain purposes under many common circumstances. And yet it was Einstein's particular genius to grasp and then explicate why additional theory, in many respects completely at odds with the Newtonian paradigm, was not only possible but necessary to achieve a more complete understanding of the nature of the physical universe. Altman's handbook suggests that behavioral economics can serve a similar function for economic behavior. It is indisputable that behavior economics has made great strides in its relatively short period of existence, but it is also clear there is still much more to be done.