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Book review

How We Misunderstand Economics and Why it Matters: The Psychology of Bias, Distortion and Conspiracy, David Leiser, Yhonatan Shemesh. Routledge, London (2018).

1. Introduction

These days, economic commentaries are ubiquitous. Whether it be on TV, radio, newspapers, Internet, or Twitter, the public is inundated with news, panels, shows and views about issues such as interest rates, futures, stock prices, inflation, so much so that we may come to feel we comprehend what these phenomena mean. As it turns out, this is often not the case. In their new book, *How we misunderstand Economics and why it matters: The psychology of bias, distortion and conspiracy,* David Leiser and Yhonatan Shemesh argue that people often not only fail to understand economics, but in their efforts to comprehend even the most basic economic concepts, they hold theories and views about economics that are seriously mistaken.

In their book, the authors state that their goal is to probe people's thinking about economic issues. And they are very well qualified to do so given Leiser's social psychological and economic expertise along with Shemesh's background in cognitive science. Their aim in this volume is to analyze people's cognitions when thinking about economics and to inquire about how they think about economic constructs using existing psychological and cognitive theory and empirical research. This is a scholarly work with over 500 references, well-grounded in academic theory and empirical work. Further, it is a comprehensive volume in that the authors cover a broad range of varied topics including money, inflation, unemployment, capitalism, trade- offs, rent control and taxation. At the same time, it is a highly enjoyable read given that it is sprinkled with vignettes, scenarios, narratives, and cartoons to illustrate various points.

It is fascinating to learn how people develop explanations about economics. One of the sources of people's misconceptions that the authors discuss is the "intentionality bias" (Rosset, 2008) where people assume that certain economic events have been caused deliberately by individuals rather than by an interaction of many factors. They argue, for example, that if something goes wrong in the economic sphere, people will search for somebody or some group whom they can blame as seen in various conspiracy theories that are expounded. Another source of cognitive misconception can be found in observations and discussions people may have when debating economic issues that directly affect their lives. While they may come up with possible solutions to a particular dilemma, these solutions tend to be simplistic and erroneous, according to Leiser and Shemesh. The authors observe that people tend to think of obvious ideas and to be content with them rather than explore more complex analyses. This suggests that people's analyses of economic issues, particularly when they are directly affected by them, may be imbued with emotion which may render them somewhat immutable. Moreover, the authors go on to argue that people often have inflated confidence in their own understanding based on their lack of sophistication about the workings of economics. The authors observe that the non-economist's thinking is characterized by a short range and a narrow scope that focuses on direct links while ignoring indirect links, feedback loops, and especially not allowing for aggregate effects, which are the main causal factors in economics.

These and other remarks derive from the authors' application of psychological theory and empirical research to their observations of individuals who are constantly navigating the economic landscape, a task that is much more complicated than they realize. I found this part truly illuminating. Such insights would not be possible without collaboration and exchange of ideas between psychologists and economists that generate new perspectives as well as testable hypotheses. A similar observation can be found in the conclusions of a report of a panel discussion that was held at a joint academic conference in 2013 in Atlanta, Georgia. This conference brought together two scientific organizations, The International Association for Research in Economic Psychology (IAREP) and The Society for the Advancement of Behavioral Economics (SABE) (Greenglass et al., 2014). The panel assembled a group of seven psychologists and economists to discuss the causes and effects of the 2008 financial crisis. The report of the panel discussion concludes by highlighting the importance of bringing together psychologists and economists to study and analyze the financial crisis and its effects. In a similar way, this book can be seen as demonstrating how economic attitudes can be further understood through an interdisciplinary lens involving psychology and economics.

2. Summary of the book chapters

The Introductory chapter explains that most lay people lack an elementary grasp of basic economic concepts and are unaware of the extent of their ignorance. The authors remark that this is significant because what people think affects how they act, and how they act, collectively, affects the economy. Moreover, people's beliefs figure prominently in the democratic process, constraining which policies can be implemented and at what political cost. In general, economists are unaware of how profound the roots of this misunderstanding are.

Chapters 2 and 3 are "twin chapter" that focus on the mismatch between economic thinking and human cognitive abilities from two complementary perspectives. Chapter 2 asks why economic theory is so difficult. While lay understanding in *any* domain is poor (Shtulman, 2017; Sloman & Fernbach, 2017) the authors identify key features of economic thinking responsible for making economic theory more difficult to understand than many other theories. They identify the tendency of laypeople to focus on the individuals, their beliefs, desires, intentions, and goals and actions. By contrast, the authors note that economic analyses rely on aggregate measures, which abstracts away from individuals and their transactions. Economic theory integrates direct, indirect, and feedback effects into a coherent system of causal links that reach static or dynamic equilibria. Finally, economic explanations are impersonal and amoral.

Chapter 3 focuses on the constraints of human cognition and shows how information processing limitations, which are well known from cognitive psychology research, manifest themselves when non-specialists are confronted by economic phenomena. The authors argue that known domain-general limitations in information processing lead them to entertain only "simple and direct causes, to neglect indirect effects and the links between them, and to only think of obvious and salient solutions to problems". According to the authors, this is the reason people generally do not appreciate opportunity costs (failing to generate and evaluate alternatives) and ignore equilibria (failing to consider interdependence), among several additional flaws discussed.

Having highlighted the challenges inherent in lay economic understanding raises the question of how people come to hold the opinions that they do. Leiser and Shemesh point to several avenues. One is the use of heuristics which is discussed further here. The groundwork is laid in Chapter 4, devoted to unemployment and inflation, two variables "that non-economists care greatly about". Beliefs regarding these variables illustrate some of the abstract claims presented in the previous two chapters, such as, that people tend to come up with only the most obvious and direct solutions (e.g. "make work" policies) to unemployment.

After discussing unemployment and inflation in isolation, Chapter 5 discusses then analyzes how these two and other economics variables are related in people's mind. Leiser and Shemesh present the striking logic that underlies people's evaluations of how macroeconomic variables interact: "good" things enhance other "good" things and suppress "bad" ones, while "bad" things enhance other "bad" ones and suppress "good" ones. This heuristic, the Good-Begets-Good (GBG) heuristic (Leiser & Aroch, 2009), explains how people manage to readily answer how any two variables interact, without a clue as to the mechanism responsible for the putative influence. It is by dint of this logic that they believe that high inflation and high unemployment go together, whereas in reality, the two variables are negatively correlated (if at all). The GBG heuristic means that on a large scale, people generate waves of optimism and pessimism, which go on to affect aggregate demand. The authors quote various studies by economists that support their claim.

In Chapter 6 the authors discuss another way people use to understand economics without proper knowledge: reasoning by metaphor. In their book, Leiser and Shemesh show that media and political discourse are saturated with economic metaphors and note that these metaphors trickle down to the public. Their use carries a heavy cost; they "highlight and hide", putting a specific spin on our understanding of important economic concepts. The authors engage in a profound analysis of metaphors and their psychological building blocks, the "framework theories" of biology, psychology, and physics. This explains in particular conspiracy ideation and over-attribution of economic events to the intentions and actions of individuals. As an example, the chapter describes a study on public perceptions of the causes of the 2008 financial crisis, where it was found that most people blame the crisis on the intellectual and moral failings of individuals rather than flaws in the economic system (Leiser, Benita, & Bourgeois-Gironde, 2016; Leiser, Bourgeois-Gironde, & Benita, 2010).

These discussions lead (Chapter 7) to an analysis of ideology, another way to have opinions without knowledge, in the context of views about capitalism. They identify two central factors shaping lay views: attitudes towards profits, and conceptions of fairness. Anti-capitalist beliefs are rooted in a social view of the world as a place of cooperation and harmony, where people are naturally compassionate. Pro-capitalist beliefs stem from a view of the world as a place of competition over resources, where people are naturally self-interested. Leiser and Shemesh engage in a thorough assessment of the literature on attitudes towards capitalism and conclude that people adopt their beliefs as part of their political ideology, thus avoiding the need to deliberate about individual economic issues.

In Chapter 8, the authors discuss money and wealth. They present the standard account of the relations between commodity and fiat money, the latter being grounded in the trust of the community, and orchestrated by a central authority. They then go on to show that people do not distinguish money from wealth, leading to various serious misconceptions, such as the notion that trade is a zero-sum game, whereby exports should be preferred to imports because they bring in money. The authors next survey many studies that show that fiat money itself becomes imbued with emotional value, so that for example, the destruction of a pile of money evokes strong emotions. Summarizing that literature, they describe a gradient, from "real" cash by way of bank credit to "virtual" money embedded in financial instruments, so that people consider some forms of money as more "real" than others, which explains various irrational preferences, such as the greater willingness to gamble casino tokens than their cash equivalent, or the appeal of dividend distribution for holders of stocks.

Chapter 9 is devoted to a discussion of the literature on financial literacy. They describe how untrained people have difficulty understanding even basic financial concepts such as the functioning of an interest rate or the principle of risk diversification, and remind us that low levels of financial literacy are associated with poorer economic outcomes (Aprea et al., 2016). While the authors are in favor of financial education, they also report on thorough research that concludes that financial education has little to no effect on knowledge or lasting behavioral change. They further describe studies showing that what matters most for financial behavior are personality characteristics such as locus of control, numeracy, conscientiousness, and the tendency to procrastinate (van Raaij, 2016). The authors therefore insist that regulators must accept that financial education is insufficient and other means to enlighten and protect the public are needed. Beyond financial education, the authors raise the issue of economic education, required to enable citizens to participate knowledgeably in debates on essential economic and social choices. This chapter contains little new information, but it is interesting in that it completes the picture the authors are drawing: ordinary people fail to understand economic thinking, and it is also fruitless to teach them even topics directly relevant to their own economic activity. Accordingly, Leiser and Shemesh hold that economic literacy training should concentrate on developing an appreciation for the complexities of economic thinking.

These considerations are expanded in Chapter 10 which summarizes the preceding ones before developing implications of this work for public policy. Congdon, Kling, and Mullainathan (2011) and Shafir, 2012 did something similar for behavioral economics, drawing some public policy consequences from the way the public behaves irrationally in predictable ways. Leiser and Shemesh attempt a parallel task and discuss the implications of ingrained misunderstanding by the public for public policy. Based on the work they surveyed in the book, they maintain that much of economics policy is too complex to be taught to the public. At the same time, there are many policies that are intelligible and benefit the public, and these should always be explained to the public. This may generate enough goodwill and trust so that when more complex decisions are called for, the public will appreciate that the authorities have their best interest at heart and will trust their decision. We should be grateful to the authors for forcing us to face the issue: should our societies be run by "econocrats?" Should policies be determined by "the people", now we took the measure of how ignorant the people are? While the specific suggestions offered in the chapter are interesting, this is clearly a debate that must still take place.

3. Other books in the field

There are other books that discuss the failure of the public to understand economic matters. For example, Ariely and Jones (2008) report on biased decision making and Thaler (2015) reports on misbehaving. What sets the Leiser and Shemesh book apart is its focus on misunderstanding and lay misconceptions about how the economy functions. Leiser and Shemesh's work is the first to document this in depth, specifically for the understanding of economics. Moreover, they identify key features of economic thinking responsible for making economics more difficult to understand than other domains. This is why I consider Chapter 2 and 3 to be the most novel and important chapters, as they lay out the main argument, richly illustrated in later chapters. I also liked chapter 5, that shows how "the economy" is perceived very globally, and how this tendency affects beliefs and predictions that in turn affect the economy. The chapters on metaphors and ideology were also interesting for the way Leiser and Shemesh show how they are really substitutes for a proper understanding, in societies were people are expected to have an opinion but are not capable of forming one, though these chapters were perhaps a little too detailed for the purpose.

4. Implications and conclusions

Repercussions of faulty reasoning in the economic sphere are explored in this book where it is stated that it is easy to ignore the economic forces that shape our lives whether it be in the policies of central banks or laws passed at various levels that regulate monetary matters.

When individuals are called upon to judge public policy, it is essential that their opinions be based on sound knowledge as opposed to naïve and simplistic theories, metaphors, and heuristics. With rigorous and comprehensive knowledge, not only will citizens make better decisions, but nations as well will benefit. Given the broad implications of faulty reasoning in the economic sphere for individuals as well as for governance and for society, this book is a must read for laypeople, policy makers, government officials, researchers as well as students.

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