Review Essay

A Wealth of Notions

Kieran Healy¹ Freakonomics: A Rogue Economist Explores the Hidden Side of Everything.

William Morrow, 2005.

Steven Levitt and Stephen Dubner.

I will admit that I rolled my eyes. Behold the Freakonomist! "Politically incorrect in the best, most essential way," the blurb said. The work of an allegedly "rogue economist," who goes out of his way in the first few pages to say he is "afraid of calculus" and does not know how to do theory. Amazing! Incidentally, this particular rogue trained at Harvard and MIT, was at the Harvard Society of Fellows, won the John Bates Clark medal and teaches at the University of Chicago. Moreover, since the book's publication in 2005, Freakonomics has become an enormous bestseller, enjoying widespread media coverage, a widely-linked website, and a regular column in the New York Times. All of which makes Steven Levitt an interesting kind of maverick. If only my own fear of calculus had propelled me towards the same peripheries. But there is little point in carping. Steven Levitt does very high-quality work that is reliably provocative, almost always in a productive sort of way. The packaging of the book—the silly title, the effort to distance the contents from the everyday work of the dismal science, the song-and-dance to make Levitt himself seem a little, well, freakish—is mostly the result of getting a journalist and a marketing department on board. It may also be a consequence of turning out the goods a little too fast. The book itself is a bit thin. Yet the underlying material matters both because it is substantively interesting and because it exemplifies a kind of applied economics that is becoming increasingly prevalent. Levitt is less freak and more foreshadow, an example of what the future may hold not just for the practice of economics, but for social science more generally. Sociologists should pay attention to the substance of what he is doing, and then ask whether we think we have something better to offer in response.

¹University of Arizona; e-mail: kjhealy@arizona.edu.

A Wealth of Notions 121

Bearing in mind that each step is much easier to say than to do, Levitt's standard operating procedure is as follows: (1) Find an interesting puzzle, (2) Get hold of a relevant dataset, the bigger the better, (3) (This is the crucial step) Come up with a really clever instrumental variable, measurement technique, natural experiment, or other methodological move that extracts evidence from the data in a surprising and compelling way, and (4) Voila! You can now demonstrate some elegant, usually counterintuitive, social mechanism. The book gives a tour of Levitt's many successes in applying his enormous talent for this kind of work. The substantive topics range from the whimsically neat to the seriously provocative. On the one hand, we have cheating in Sumo wrestling tournaments or patterns of free-riding on a bagel delivery service. On the other hand, there are estimates of the long-term effects of Roe vs. Wade on crime rates (via abortion rates), the economics of drug-dealing, or the effects of gun control legislation or sentencing policy on crime rates. Levitt's knack for finding striking answers to tricky problems using recalcitrant data is remarkable.

The first thing to notice is that none of these research questions is unique to economics. In this respect, Levitt's protests that he is not a regular economist are more than just marketing talk. As Freakonomics moves from topic to topic, it is clear that empirical puzzles about social action interest Levitt much more than a desire to elaborate or extend the theoretical framework that characterizes modern economics. Now, what makes for a distinctively economic approach is itself a contentious problem. There are several answers available from within the discipline itself, and economists tend to go back and forth between them as the circumstances demand. Often, they like to think of themselves as the hardheaded realists of the social sciences. On this view, social life is about rational agents selfishly and unremittingly pursuing their goals under conditions of scarcity. Thus, economics is about building rigorous models that capture these facts of life. The contrast is with woolly headed humanists and bleeding-heart sociologists, who allegedly prefer altruism over selfinterest, and social norms or culture to individual rationality. At other times, though, economists play the role of hand-wringing rationalists. In this interpretation, individuals frequently fall short of the rational ideal. They follow some rule of thumb rather than work out the probabilities when they make decisions. They fail to take advantage of others when the opportunity arises, even when there is no cost to themselves. They tip at restaurants they will never visit again. Thus, economics is prescriptive rather than descriptive. It tells us how we ought to act or would act if only we were clever enough to think straight. And at yet other times, economists claim an instrumentalist middle-way. They freely acknowledge

that their models make unrealistic assumptions—what science worth its salt does not?—but argue that as long as people in the aggregate act as if they were rational utility maximizers, then economics is the best game in town. For its advocates, this is an ideal position, a way to have your theoretical cake and eat it. Critics charge this makes it impossible to reject the null hypothesis in research: If people do not seem to be acting in a rationally self-interested way, you are obviously not looking hard enough.

Where does *Freakonomics* stand? On the face of it, it is in the realist camp:

What this book is about is stripping a layer or two from the surface of modern life and seeing what is happening underneath ... Incentives are the cornerstone of modern life ... Economics is, at root, the study of incentives: How people get what they want, or need, especially when other people want or need the same thing (12).

Unless you already know what an incentive is, however, it is hard to make any sense of this definition. Although the book does a good job conveying the findings of Levitt's research, its treatment of important concepts and methods is breezy, even allowing for the fact that its goal is to reach a big audience. Initially, the book's story is straightforward: People respond rationally to incentives, and the data reflect this if you look at them the right way. Levitt's research on the commissions earned by realtors is like this. He is able to show that realtors generally sell other people's homes for less money than they sell their own (and for how much less). This is because the extra commission they stand to make from getting a house to sell for \$310,000 instead of \$300,000 is too small to make the extra time and effort worth their while. Elsewhere, the detective work is even more impressive. Careful analysis of data on patterns of responses to multiple-choice guizzes administered to third-graders is used to demonstrate that teachers cheated on behalf of their students in order to improve average performances on mandatory tests. Here the trick is using the data to reveal a perverse incentive at work. But in many other cases, it is very tricky to figure out where the incentives really are, what form they take, or what the game being played actually is. In patterns of baby-naming, for instance, the incentives are less clear and the precise nature of the process is difficult to specify. (This topic has also been investigated by sociologists, a point I return to below.)

As Levitt's empirical concerns broaden, the notion of incentives is forced to do more and more work. Incentives can be financial, social, murky, moral, perverse, hidden, planned, misplaced, other-directed, and so on. Like the "positive reinforcement" of behaviorist psychology or the "functional imperatives" of 1960s sociology, "incentives" threatens to become an all-purpose placeholder having a specific meaning in each particular case, but without adding up to a distinctive, unified explanatory

A Wealth of Notions 123

concept. The danger is that we will always be able to explain things in terms of incentives, as long as we are prepared to make the concept of incentives broad enough to include whatever it is that gives people reason to act in the situation under study.

A reader who just wants to learn about the many neat findings does not have to worry about the way the theme of "It is all incentives" is twisted this way and that, or care that it begins to fray under the stress. But there are implications for the kind of economics that Levitt is doing. At the very beginning of *Freakonomics*, we get a glimpse of the book as it might have been:

We did consider, for about 6 minutes, writing a book that would revolve around a single theme—the theory and practice of applied microeconomics anyone?—but opted instead for a sort of treasure-hunt approach (14).

A book called Explorations in Data-Driven Econometric Methods for Plausibly Inferring Causal Mechanisms in Many Social Contexts probably would not have gotten very far either. But that is essentially what Freakonomics is. Most of the distinctive themes and theories of economics are absent from it, most notably the preoccupation with efficient markets and the commitment to the rationality of individuals, narrowly conceived. Instead, statistical methods are center stage. As to the substance of the research questions, Levitt freely draws on hypotheses and theory from elsewhere, notably sociology and psychology. His work can be seen as speaking to those fields as much as to economics. This becomes clearer as the book progresses. In cases like the realtors, Levitt's contribution is to find a clever way to empirically confirm (and quantify) something that economic theory straightforwardly predicts. Elsewhere, though, the connection to this kind of economic theory is much less direct, repeated reference to incentives notwithstanding, and Levitt's contribution rests on his more general talent for connecting good research questions to data.

Those questions are substantively sociological: Levitt is interested in school choice, test-score gaps, and discrimination and especially in the effects of various policy interventions on crime rates. The latter work includes, most famously, his argument that the legalization of abortion in the early 1970s led to a fall in crime rates in the early 1990s. The causal link is that the liberalization of reproductive meant fewer children were born to younger or poorer women or to women in other adverse circumstances associated with higher rates of criminal activity. As might be expected with a subject of this sort, the details of the argument and the strength of the empirical support for it have been disputed. Here the gap between Steven Levitt, author of refereed journal articles, and Steven Levitt, Freakonomist, is at its widest: The book glosses over the contro-

versies in a way that makes the issues seem more settled than they are. Findings from multivariate analyses are presented more like decisive natural experiments, when on closer inspection there is much to argue with.

In an ideal world, Levitt would represent a new breed of empirically oriented researcher working across the boundaries of social science disciplines, expanding our knowledge of a wide variety of social processes and perhaps laying the foundations of a new kind of social science, with the help of people working at equivalent boundaries in other fields such as cognitive psychology and economic sociology. We can hope for the best, but there is cause for pessimism. Economics has a bad habit of routinely rediscovering (and taking credit for) ideas that are well-established elsewhere. Sometimes, whole fields are victimized in this way-social networks, institutional analysis, and culture—as smart economists assume an idea that is new to them, is new to everyone, and go off and reinvent some wheels. Freakonomics does have some sociology and psychology lurking in its footnotes. A stronger engagement with Stanley Lieberson's work on shifting trends in baby-naming practices would have made Chapter 6 a lot more interesting, for instance. There are one or two instances where a well-researched idea is presented as though no one had ever thought of it before. Roland Fryer's working paper on "The Economics of Acting White" is cited as the source of the notion that "some black students 'have tremendous disincentives to invest in particular behaviors ... due to the fact that they may be deemed a person who is trying to act like a white person." This idea was articulated just in this form in the mid-70s by John Ogbu (as the "oppositional culture" hypothesis) and arguably also by James Coleman in The Adolescent Society, published in 1961. Perhaps a mention of the large literature on the topic would have detracted from the Freakonomic buzz.

In some ways, Levitt is the applied successor of economists such as George Akerlof and Thomas Schelling, thinkers with a broad interest in social processes and a creative approach to understanding them that is rooted in their training in economics but not limited by it. He differs from them in his preference for quantitative data analysis over model-building, but shares their attraction to settings that involve incentives and co-ordination, broadly defined, but that are not markets. Schelling's and Akerlof's main intellectual influence has been outside of economics, in political science, public policy, and sociology. Their insights also took a little longer to be recognized within economics. Levitt, on the other hand, is firmly established within his field. The methods he favors are also firmly established within economics, even if his subject matter is not. Indeed, while Levitt is a highly ingenious in his application of regression techniques in general and instrumental variables in particular, he is not a

A Wealth of Notions 125

pioneer in their development. Quantitatively minded sociologists might object to the way *Freakonomics* makes regression analysis seem the exclusive property of economics, but economists are also likely to cavil that the book makes widely used instrumental variable methods seem more exotic than they are.

What implications does the underlying research program, as opposed to the successful popularization, have for sociology and its relationship to economics? Whether we like it or not, economics is well positioned to innovate in the social sciences: It is well funded, it attracts very talented graduate students, and it provides them with excellent training in mathematical modeling and quantitative techniques. But it is hamstrung by its lack of interest in teaching those same students much of anything else (such as its own intellectual history as a field) and by its tendency to look down on cognate disciplines as poor relations, even as it regularly raids them for ideas and research questions. In this context the success of applied econometrics within the field is of some interest. The theoretical problems of and standard objections to the economistic way of thinking are widely known (who among us cannot rehearse the shortcomings of homo economicus?) but they do not by themselves stop empirical research from getting done. Perhaps ironically, economics provides a collective solution to its problems: Reflections on its own foundations are the job of a small cadre of methodologists and philosophers, and the subject of occasional, cathartic "We Can't Go On Like This" speeches by Presidents of the AEA or Nobel Laureates. Meanwhile, it is business as usual for everyone else. Sociology, by contrast, encourages its graduate students to fret about foundational questions, and competition between theorists takes the form of alternative visions for the whole field built up from first principles.

In particular, the strictly theoretical shortcomings of rational actor models are not an impediment to the kind of econometric work that Levitt specializes in. As the book shows, the basic microeconomic imagery of rational response to incentives is very flexible, and when combined with modern statistical techniques it is very powerful. *Freakonomics* is only part of a wave of wide-ranging empirical research that economists have been conducting in recent years. Natural experiments in the field (seen increasingly in development economics) and experiments in the laboratory (courtesy of the behavioral revolution) are two other important trends. These lines of work are united methodologically by the desire to pin down causal mechanisms rather than elaborating purely formal models. Instrumental-variable, experimental and quasi-experimental methods are all designed to fight the twin curses of endogeneity and omitted-variable bias. Substantively, they share a tendency to apply microeconomic reasoning to a wider

field of substantive topics, using real data. And, not coincidentally, they impinge on the traditional concerns of sociologists.

In short, economists are migrating toward sociology, and they bring with them a substantial amount of analytical firepower, together with a well-connected public relations division. The history of interaction between sociology and economics is perhaps better characterized by sociological concepts such as social closure, network density, opportunity hoarding, boundary-maintenance, and symbolic violence than by economic ideas like free trade, efficient exchange, and mutual benefit. Yet sociologists would be well advised to meet the challenge head-on, rather than pretend it is not worth our time, or claim that the questions are trivial, or that the answers are to be found in Soc 101. Those are the reactions of a dominant field, and this is not the position sociology finds itself in these days. Optimistically, sociology's internal heterogeneity can be a source of resilience and innovation. It carries a richer tradition of research on social structure, institutions and culture than economics, as well as a much stronger history of field studies and participant observation. I doubt, we will see Sociomania competing with Freakonomics on the best-seller lists in the near future, if for no other reason than that spot in the attention space has now been occupied. But it would be unwise to laugh off the challenge that Freakonomics represents. As the economist Tyler Cowen has remarked, some kind of empirical sociological economics or economic sociology is going to be making the running over the next few decades, and "the only question is who will be doing it, us or them."