En total, queda un libro imprescindible, no sólo por la riqueza argumental que exhibe sino por la completud del estudio que despliega en la faceta analítico/empírica, todo lo que, muy posiblemente, no tiene parangón en lo publicado al día de la fecha ni fuera ni dentro de España.

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HAROLD KINCAID & DON ROSS, eds. 2009. The Oxford Handbook of Philosophy of Economics. Oxford/New York: Oxford University Press.

This is a book on Philosophy of Economics. More precisely, on the epistemological issues regarding the Economic Science. There is nothing on Economics and Philosophy, like the relevance of economic analysis on moral issues, or on the Economics of Philosophy. It is about the status of economic laws, about whether the advances in Economics are well founded on its methodological resources or about whether the disputes among economists have their roots on facts or values, to name just a few issues.

The authors that write in the first part on views in Philosophy of Economics provide us with the following quotes:

Having in this way satisfied metaphysical scruples about the impossibility of causation without laws, one can study causal explanations of economic phenomena without worrying about whether there are economic laws. (Hausman, p. 51)

Almost everything mysterious and problematical to the empiricist philosopher of science about economics is resolved once we understand economics as a biological science. Such an understanding pretty much leaves economics as it has been. (Rosenberg, p. 59)

The special challenge my philosophy of economics must meet is to provide a scientific realist account that is realistic of a discipline that deals with a complex subject and operates with highly unrealistic models. (Mäki, p. 68)

After too many encounters with post-modern philosophers it is reassuring to see that the main names in the field of Philosophy of Economics understand that the main purpose of an epistemologist is not to give lessons to scientists on how to do their research, but to provide an understanding on why a discipline is able to show some progress in the study of our reality. In doing this, one can show, for instance, that the regularities in one science have the status of laws, but that the regularities in another one do not. Then one can use this difference to explain the differences in methodology and scope between the two sciences. This is good Philosophy of Science and this is the confessed aim of the Handbook.

The article that finishes the first part is a hard argued piece by Mirowski on why the Economics of Information has not yet the status of a theory. There are however some strange arguments within it. For instance, it accuses the rational expectations school for saying that its models assume that the introduction of rational expectations

in the neoclassical model is on the form of expecting the equilibria that follow from those precise models. Is there any other way?

Not all of the articles, however, stick to the aim outlined before. Some articles provide the reader with suggestive changes in some perceptions, assumptions or interpretations in Economics, but with little epistemological discussions. One example is the article by Bicchieri on Rationality and Indeterminacy, already in the second part of the Handbook, dedicated to Microeconomics.

Do not get me wrong. I do like this kind of articles and I do think they provide the material for an epistemological discussion. What I am saying is that these articles do not contain the discussion. In the particular example of Bicchieri's, the Handbook solves this by providing us with Woodward's article on Experimental Investigations of Social Preferences that discusses the methodological problems of identification regarding norm-based preferences as presented in Bicchieri's.

The next two articles are other examples. Davis presents a work about the reinterpretation and redefinition of primitives regarding the individual due to the new approaches such as game theory and behavioural economics. Then, Don Ross provides an article on the kind of models used in economics to define a person. In particular, it focuses on a possible integration of different dynamics that treat a person as a set of agents. As with the article of Bicchieri, both provide a nice overview of the different definitions and models, but discuss no epistemological issues other than the historical relation of the changes of the elements considered.

Guala presents a good epistemological study on experimental economics. It shows not only the changing on economic thought and hypothesis due to experimental economics, but also the methodological issues involved, like the relation of experiments to models rather than to core theories and the observation that the means-goal relation is empirical, and thus must be done *a posteriori*. The argumentation in the paper is based on the discovery of three strata in experimenters' pronouncements, namely, a high-level discourse about theory, evidence, confirmation and falsification, a middle-level discourse about experimental design and a low-level discourse about the precepts of experimental economics.

Guala makes very good points on how to deal with causation in experiments even if the definition of causation is not very precise. On the other hand, this study on experimental methodology was perhaps the best opportunity in this Handbook to say something about the old descriptive-normative dual aspect of economics. This is a missed chance.

Alexandrova and Northcott present the thesis that Economics advances not because more and better theories are offered, or because more and better empirical data are obtained, but because economics has some success as engineers in designing economic mechanisms. They make their case through the case study of spectrum auctions, where they claim that the success came because the economists looked at the theory for general principles, but then relied on simulations to find the best design. There is no doubt that the spectrum auctions case shows this kind of work, but it is debatable that one can end the discussion because of this case.

There are by far more engineers than theoretical and applied physicists, but one would be mistaken by saying that the success and the progress in Physics is made by engineers. Likewise, observing that most of the time economists work as engineers is not saying that our understanding of the basic principles and laws in economics come from this praxis. It may be true, but one expects a more convincing discussion.

Vromen writes on causation. He proposes to take evolutionary explanations and see how they adapt to Economics. Tinbergens' four questions on evolutionary causation are (i) what are the mechanisms that cause behaviour, (ii) what is the developmental trajectory, (iii) what is the survival value, and (iv) how did it evolve. Tinbergens' questions present a detailed rephrasing of the distinction between ultimate and proximate causes. Vromen uses this classification, and finds that cultural evolution poses its own problems to differentiate levels of causation, the main reason being a kind of feedback in the line of causation. Here learning is the key. The mechanisms of learning have been ultimately produced by evolution, but at the same time actual learning is based on proximate causes. The discussion is compelling, but one issue is left out: as we understand the way we learn, can the publication of this theory make us change the way we learn? Can we use our understanding of the way the framing and heuristics condition our learning to our advantage?

The part on Macroeconomics starts with Humphreys' work, which acknowledges that many of the methods used in computational economics have considerable technical interest but no particular philosophical relevance. Yet, he manages to write a few pages of interest. He discusses the extent to which the methods of computational economics are peculiar to economics rather than consisting of cross-disciplinary methods that are drawn from, or applicable to, other sciences. He deals with the interface problem: on the one hand, the observable is the only connexion to reality, and, on the other hand, the observable must be presented in an accessible way to be understood by the human mind. It is most intriguing that one of the very few discussions on normative and descriptive models in the Handbook, however short, and including a paragraph on adscriptive science, is presented here.

Hoover argues that the economic reductionism is different from reductionism in other sciences. In particular, economists have to deal with intentional states, something forbidden to biologists, for instance. There is a weak reductionism whose goal is to preserve the fundamental object of reduction of the macro to the micro. Hoovers objects that this cannot be the goal, and that one needs to show that macroeconomics could have an ontological anchor in the individual, while preserving ontological independence for causally interacting aggregates. Money, for instance, is epistemologically objective in that it exists independently of my representations, though not independently of all representations, and is ontologically subjective. Hoover discusses rational expectations, representative agent models, among other issues, with this focus in mind. The success of his approach is limited as, in his own words, the challenge for any antireductionist macroeconomics is to provide an account that both assigns an independent ontological status to microeconomic individuals and to macroeconomic aggregates and provides an intelligible account of the connection between the intentional states of the individual and the behaviour of the aggregates. One is left wonder-

ing if Hoovers is saying that something is still missing in macroeconomics itself or in the epistemological account of the work of macroeconomics.

Cartwright writes on causality, invariance and policy. First, Cartwright notes the widespread use of invariance, understood as the persistence of correlation, in both economics and philosophy studies of causality. Then, she argues that the kind of invariance used in economics does its job, but that the one used in philosophy does not. However, causation and invariance are, in Cartwright words, poor tools for predicting outcomes of policy. I have a major concern with this last claim, more precisely, with meaning of prediction. Consider the following set of predictions: (i) the stock market behaviour for a given date, (ii) the evolution of a price after a change in a regulation, and (iii) a market's general performance after an economic policy. Cartwright ends her work with a question on what to do. Perhaps all we can make is predictions of the third kind and only a few of the second.

Du Plessis notices that most applied econometric work occurs when our ignorance is extensive, and then discusses the risks of data mining: (i) selection of regressors; (ii) data and sample selection; (iii) diagnosis testing, and (iv) respecification. An analysis of frameworks that help us understanding when the risk is likely to lead to undesired outcomes follows the discussion. Perhaps the best point of the article is when it shows how econometrics calls for certain ways of addressing the risks, but, nevertheless, most publications in the field do not abide to the best methodological standards. Du Pessis goes beyond this and proposes institutional arrangements to solve the problem. The need of a culture of repetition and criticism is one of them.

Kincaid makes a compelling argument that economic growth is an example of an economic problem in which the division of sciences may not work. Kincaid defends that the input of "narratives" from other sciences may be incorporated as ways to identify the factors explaining shifts and slopes of supply and demand curves.

Fields offers a fine survey in which the reader can appreciate how segmented models of labor markets address the many issues regarding employment in developing countries. However, I see almost no methodological discussions beyond the comparison of hypotheses in the different models.

Dowding opens the last part, dedicated to welfare. He summarizes the view that any attempt to define welfare has to have personal preferences as primitives. Attempts, like the "Aristotelian", "Kantian", "Resourcist" and, of course, "Utilitarianism" pose severe problems that, when solved, need the use of preferences and of interpersonal comparisons. However, Dowding argues that global comparisons between individuals are not necessary for public policy, and that a statistical approach *a la* Roemer may be enough.

Binmore reminds us about the status of modern utility theory: (i) utility theory is not explanatory, but descriptive, (ii) its status is defined after preferences, which are the primitive element in the theory, and (iii) rationality is consistency, which means that it is about means rather than ends (vindicating Hume and opposing Kant). Binmore also reminds us about the normative and adscriptive aspects of utility theory (Savage vs. Allais). All this previous discussion leads to explaining Harsanyi's view on interpersonal comparisons of utilities, which, in essence, says that this is something we

256 Book Reviews

all do, and that having empathetic preferences is the same thing as subscribing to a standard for making interpersonal comparisons. He finally suggests that social evolution tends to give people the same empathetic preferences. However this last hypothesis is not developed.

Angner's main point is that economists and psychologists operate with different and incompatible accounts of well-being which are translated into different approaches to measurement. Economic measures are about preference satisfaction, whereas psychologists' are about mental states. This is a very clarifying chapter, useful to understand disagreements and difficulties between economists and psychologists.

Dasgupta writes an extensive essay showing that, contrary to some beliefs (reflected, for instance, in some of Sen's works), economists do not usually argue about values, but about facts. Another article showing Sen's view would have been appreciated.

In sum, this is an excellent Handbook that delivers what it promises and goes a little beyond. One learns about methodological insights in Micro, Macro and Welfare economics, and also finds accounts on historical changes and reformulations of the elements of the discipline that helps understanding many modern discussions.

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EMILIO LA ROSA. 2009. La fabricación de nuevas patologías. De la salud a la enfermedad. México: F.C.E.

El libro que vamos a comentar se adentra en un tema de actualidad, pero aún poco tratado desde posiciones académicas: la fabricación de nuevas enfermedades por parte de la industria farmacéutica. Procesos biológicos a menudo banales en la evolución natural de la vida (por ejemplo, la calvicie) son tratados conforme a un criterio comercial y empresarial y se transforman en síndromes que pueden ser objeto de tratamiento médico. Emilio La Rosa, médico especialista en Salud Pública y, en el momento de la publicación, miembro del comité Internacional de Bioética de la UNESCO, se acerca a este fenómeno como parte de un proceso más amplio de la medicalización de la vida y el bienestar.

El libro se estructura en cinco capítulos, cada uno de los cuales trata un aspecto fundamental del problema. El primero intenta esclarecer qué es la salud y qué es la enfermedad, recorriendo las diferentes propuestas realizadas a lo largo de la historia, así como los debates más recientes sobre la definición social de la enfermedad a partir de toda una colección de determinantes sociales, medioambientales, psicológicos y culturales. La Rosa analiza también los intentos de definir lo normal y lo patológico a partir de promedios y desviaciones en torno a diferentes parámetros biológicos. Este primer capítulo nos presenta, por tanto, el marco conceptual en el que se desarrolla la actividad de la industria farmacéutica. El autor no toma partido explícito entre estas definiciones de salud y enfermedad, sino que defiende la necesidad de reconsiderar el enfo-