

Handbook of
THE PHILOSOPHY OF SCIENCE

General Editors: DOV M. GABBAY, PAUL THAGARD, AND JOHN WOODS

PHILOSOPHY
of ECONOMICS



Edited by Uskali Mäki



Handbook of the Philosophy of Science

Volume 13

Philosophy of Economics

Edited by

Uskali Mäki

Director, Academy of Finland Centre of Excellence
in the Philosophy of the Social Sciences
University of Helsinki, Finland
Department of Political and Economic Studies



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PREFACE

Uskali Mäki

In the course of its history, economics has been variously defined, including as the study of the consequences of actors' selfish pursuit of maximum wealth; and more abstractly in terms of 'economizing' or 'getting the most for the least'; in terms of exchange in the market; in terms of whatever can be identified by 'the measuring rod of money'; and in terms of rational choice faced with the scarcity of means in relation to the multiplicity of ends.

Even if conceived as a science of choice, only a small proportion of economic explanation is designed to explain episodes of individual behaviour. Most of it seeks to account for aggregate or social level phenomena, patterns, or regularities that have been observed statistically or through ordinary experience. The highly idealized and formalized models built for this purpose depict various kinds of social — typically market-like — “invisible hand” mechanisms that mediate between individual choices and collective outcomes as their unintended consequences. Such outcomes are represented as equilibrium positions, and their explanation or prediction often does not describe the process whereby the equilibria are attained. Adding a normative dimension to the explanatory use of social mechanisms, these outcomes have been portrayed either as generous such as in the Mandevillian idea of “private vices, public virtues” and in contemporary welfare theorems, or else as undesirable products of “invisible backhand” mechanisms of prisoner's dilemma type.

Economics has characteristics that make it a particularly inviting target and playground for philosophical argument and analysis. Economics is, and throughout its history has been, a chronically contested discipline. For some, it is *the queen of the social sciences*, characterized by uncompromised formal rigour and indispensable cognitive authority in social engineering — perhaps the only social science worth the name ‘science’. For others, it is *the dismal science* in the special sense of being an empirical failure and of promoting dubious cultural values and group interests in society — a discipline that is only pretentiously scientific. (See [Mäki, 2002].)

There are many things that contribute to the controversial nature of economics. It is an academic discipline with broad public dimensions. Its concerns are connected to the most basic aspects of people's daily lives. The ideological and political stakes are obvious. As an epistemic institution, economics enjoys a strong position in contemporary society, with an institutionalized authority unquestioned by many. Yet it deals with a subject matter that is very complex and hard to get under epistemic control, so the chances of error are considerable. At the same time,

its subject matter is close to commonsense experience and beliefs, but economic theory violates them in two recognizable ways: through its theoretical idealizations, and through the corrections it suggests to make of commonsense beliefs by replacing them with allegedly deeper but counter-intuitive theories. Finally, an important source of controversy is a chronic mismatch between expectations and actual performance in relation to whatever goals economics is supposed to pursue.

Indeed, the proper goals or appropriate ambitions of economics are far from unambiguous. Some take it as an important task of economics to provide reliable predictions that will support its authoritative role in guiding economic policy. Repeated predictive failures have given rise both to ridicule among the critics and to more modest goal setting among practitioners. Such more modest goals can include some sort of explanatory understanding of how phenomena in the world might come about, or pointing out the various unavoidable tradeoffs in life, reminding the uninformed of the unpleasant fact of scarcity of resources in relation to people's wants (in doing the latter, economics would be a dismal science in an authentic sense while having some limited policy relevance). Yet, whatever view is adopted about the ambitions of economics, there will always remain some room for the critic to be dissatisfied with its performance.

Explicit controversy is typically prompted by an actual or alleged failure by economics, often at times of a crisis in the economy itself. Under the pressure of criticism and skepticism, some economists set out to defend their discipline. On both sides, arguments often ascend to metatheoretical and philosophical heights and become claims about the proper method and appropriate understanding of the nature of theory and of the goals of inquiry. Such debates, instigated by economic crises, have understandably followed a somewhat cyclical pattern.

Another possible source of philosophical reflection and debate is the emergence of new theories or research techniques that challenge more established ways of doing economics. The *Methodenstreit* of the 1880s was launched by Carl Menger's attempt to create space and justification for his new marginalist theory in the German-speaking world that was dominated by the historical school. More recently, the initiatives of experimental, behavioural and neuroeconomics have launched methodological debate and research, with philosophical arguments designed and used either to justify the new approaches or to question them.

During the 19th century and for the most part of the 20th, philosophical and methodological arguments were designed and presented by thinkers who were also practitioners in economic inquiry. Not only were they practitioners, but many of them were among the leading economists of their time. These have included Nassay Senior, John Stuart Mill, Karl Marx, Wilhelm Roscher, William Stanley Jevons, Carl Menger, Alfred Marshall, Vilfredo Pareto, Frank Knight, Lionel Robbins, Friedrich Hayek, Milton Friedman, Paul Samuelson, to name a few. At that time, there was no separate field of research for philosophical reflection on economics. On certain occasions, practitioners responded to the felt need for such reflection, but this did not lead to a collective and cumulative research characteristic of a field of specialized inquiry. Recognizable traditions were created, but there was little

cumulative progress across generations concerning the details of the arguments.

This started changing in the late 1970s as a *field* of specialization started taking shape, known as the ‘philosophy of economics’ or ‘economic methodology’ depending on the primary disciplinary context of the activity. The usual indicators of an institutionalized research field could soon be identified, such as a growing number of specialists identifying themselves with the activity; development of an intensive and extensive network of communication between them; conferences and conference sessions focusing on shared research topics; growing number of publications, both books and journal articles; founding of specialized journals in the field (*Economics and Philosophy* since 1985 and the *Journal of Economic Methodology* since 1994); a loosely defined shared research agenda, or an interconnected set of (rival and complementary) agendas; a more formalized international organization (the International Network for Economic Method [INEM] since 1989); international graduate programmes (e.g., Erasmus Institute for Philosophy and Economics [EIKE] since 1997). As unmistakable indicators of an established field, there are handbooks such as the present one, and before it, *The Handbook of Economic Methodology* [Davis *et al.*, 1998] and *The Oxford Handbook of Philosophy of Economics* [Kincaid and Ross, 2009]. There are also many anthologies that jointly cover a great deal of ground in the expanding area (e.g., [Caldwell, 1993; Davis, 2006; Hausman, 2007]).

The early stages of the field in the 1970s and the 1980s were largely shaped by an alliance with the history of economic thought that was itself experiencing a similar growth. Most participants had a background in economics rather than philosophy. Karl Popper and Imre Lakatos were the authors whose then popular and easily accessible ideas in the philosophy of science were consulted and put in use in addressing questions such as: Are economic theories falsifiable or in general empirically testable? Does (this or that theory or field in) economics make progress? Given that these and other related questions had to be largely answered in the negative, the conclusion was drawn that Popperian and Lakatosian frameworks, strictly interpreted, had better be abandoned.

The situation is now very different. Philosophy and methodology of economics has in many respects a much closer connection with frontline philosophy of science. It not only critically employs a larger range of up-to-date ideas and tools developed elsewhere in philosophy, but it also contributes to the rest of philosophy of science, based on new ideas and results developed when examining economics. While large parts of the work are still done as history and methodology of economics by economists within economics departments, an increasing proportion is done within philosophy departments as contributions to the philosophy of science.

The topics and issues of inquiry still mostly derive from the practice of economic research and debate, but the ways in which they are portrayed and resolved are increasingly dependent on contemporary developments in the philosophy of science. The (un)realisticness of assumptions in what are nowadays called models is an old and central issue, and now the philosophical analysis of economic models is in close contact with the new work on models and modeling in the rest of the philosophy of

science. Issues of causation are central for understanding economic reasoning, and the systematic utilization of philosophical work on causation has started recently. The newly launched analysis of economic explanation is connected to the ongoing philosophical work on mechanisms, unification, and contrastive questions. Many of the contributions to the philosophy of economics address issues in emerging subfields of economics, such as experimental, evolutionary, computational, institutional, behavioural, geographical as well as neuro economics. In these areas the philosophical issues are fresh and hot, providing philosophers the opportunity to watch closely and perhaps to intervene.

Much of this work is done and presented without waving flags with philosophical “isms” printed on them. Yet such labels are used and can be applied. Among the available positions we find Milton Friedman’s alleged “instrumentalism” which is supposedly the position held by many practitioners. Other practitioners (but few if any philosophers of economics) may still find Popper’s and Lakatos’s “falsificationist” frameworks attractive, especially in their metatheoretical rhetoric. Variants of “neo-Millian” realism have been formulated by philosophers (such as Daniel Hausman, Nancy Cartwright, and myself). “Critical realism” inspired by Roy Bhaskar’s work has won some souls just as in some other social sciences. There are also those — including some who pursue the rhetoric of inquiry project — who identify themselves as proponents of relativism, social constructivism or postmodernism.

The chapters of this volume are divided into two groups. Chapters in the first group deal with various philosophical issues characteristic of economics in general, from realism and Lakatos to explanation and testing, from modelling and mathematics to political ideology and feminist epistemology. Those in the second group discuss particular methods, theories and branches of economics, from forecasting and measurement to econometrics and experimentation, from rational choice and agency issues to game theory and social choice, from behavioural economics and public choice to geographical economics and evolutionary economics, and finally the economics of scientific knowledge.

The philosophy of economics is increasing in importance. First, in society at large, strong “economistic” trends (of marketization, commercialization, commodification, monetization) increasingly shape our cultural and mental landscape, and the discipline of economics relates to these processes both as a spectator and as a contributor. The performance of economics in these roles calls for philosophical scrutiny. Second, science is part of the social world and thereby also subject to these very same trends. “Naturalizing” the philosophy of science by utilizing the resources of economics therefore seems only natural. But the credibility and reliability of economics in that higher-order role is an open issue, again calling for philosophical reflection.

The undertaking ending up with this volume has taken time and effort. I warmly thank the contributors for agreeing to participate and for doing their share so excellently. Coordinating such a large group of authors has been a rewarding challenge. My thanks also go to Jane Spurr and Carol Woods for their help and

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CONTRIBUTORS

Paul Anand

The Open University, UK.

p.anand@open.ac.uk

Erik Angner

University of Alabama at Birmingham, USA.

angner@uab.edu

Roger E. Backhouse

University of Birmingham, UK and Erasmus University Rotterdam, The Netherlands.

r.e.backhouse@bham.ac.uk

Cristina Bicchieri

University of Pennsylvania, USA.

cb36@sas.upenn.edu

Marcel Boumans

University of Amsterdam, The Netherlands.

m.j.boumans@uva.nl

John Davis

Marquette University, USA and University of Amsterdam, The Netherlands.

john.davis@marquette.edu

Clive W. J. Granger

University of California at San Diego, USA.

cgranger@ucsd.edu

Til Grüne-Yanoff

Helsinki Collegium of Advanced Study, Finland.

till.grune@helsinki.fi

Francesco Guala

University of Milan, Italy.

francesco.guala@unimi.it

D. Wade Hands

University of Puget Sound, USA.

hands@pugetsound.edu

Daniel Hausman

University of Wisconsin at Madison, USA.

dhausman@wisc.edu

Kevin Hoover

Duke University, USA.

kd.hoover@duke.edu

Harold Kincaid

University of Alabama at Birmingham, USA.

kincaid@uab.edu

Hartmut Kliemt

Frankfurt School of Finance and Management, Germany.

h.kliemt@frankfurt-school.de

Tarja Knuuttila

University of Helsinki, Finland.

tarja.knuuttila@helsinki.fi

Aki Lehtinen

University of Helsinki, Finland.

aki.lehtinen@helsinki.fi

Christian List

London School of Economics, UK.

C.List@lse.ac.uk

George Loewenstein

Carnegie Mellon University, USA.

gl20@andrew.cmu.edu

Uskali Mäki

University of Helsinki, Finland.

uskali.maki@helsinki.fi

Caterina Marchionni

University of Helsinki, Finland.

caterina.marchionni@helsinki.fi

Philip Mirowski

University of Notre Dame, USA.

Philip.E.Mirowski.1@nd.edu

Mary S. Morgan

London School of Economics, UK.

M.Morgan@lse.ac.uk

Kristina Rolin

Aalto University, Finland.

kristina.rolin@hse.fi

Don Ross

University of Cape Town, South Africa.

don.ross@uct.ac.za

Aris Spanos

Virginia Tech, Blacksburgh, USA.

aris@vt.edu

Viktor J. Vanberg

University of Freiburg, Germany.
vvanberg@vwl.uni-freiburg.de

Jack Vromen

Erasmus University of Rotterdam, The Netherlands.
vromen@fbw.eur.nl

Jesus Zamora Bonilla

UNED, Spain
jpzb@fsof.uned.es

Jiji Zhang

California Institute of Technology, USA.
jiji@hss.caltech.edu

Part A

General Philosophical Themes