***Finding Philosophy in Social Science***

**Mario Bunge**

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| http://yalepress.yale.edu/yupbooks/images/full13/9780300066067.jpg | http://ecx.images-amazon.com/images/I/510fEE84NoL._SY300_.jpg |

BUNGE**, Mario, *Finding Philosophy in Social Science*, New Haven, Conn.: Yale University Press, 1996, pp. 448. ISNB 13: 978-0-300-06606-7 (hardback edition).**

**BUNGE, Mario, *Buscar la filosofía en las ciencias sociales,* 2ª ed., México: Siglo XXI Editores, 2005 [1999], pp. 588. ISBN 13: 968-23-2199-9.**

**About the book (from the publisher)**

Written by an eminent and original thinker in the philosophy of science, this book takes a fresh, unorthodox look at the key philosophical concepts and assumptions of the social sciences. Mario Bunge contends that social scientists (anthropologists, sociologists, political scientists, economists, and historians) ought not to leave philosophy to philosophers who have little expertise in or knowledge of the social sciences. Bunge urges social scientists to engage in serious philosophizing and philosophers to participate in social research. The two fields are interrelated, he says, and important advances in each can supply tools for solving problems in the other.

Bunge analyzes such concepts as fact, cause, and value that the fields of philosophy and social science share. He discusses assumptions and misassumptions involved in such current approaches as idealism, materialism, and subjectivism, and finds that none of the best-known philosophies helps to advance or even understand social science. In a highly critical appraisal of rational choice theories, Bunge insists that these models provide no solid substantive theory of society, nor do they help guide rational action. He offers ten criteria by which to evaluate philosophies of social science and proposes novel solutions to social science’s methodological and philosophical problems. He argues forcefully that a particular union of rationalism, realism, and systemism is the logical and viable philosophical stance for social science practitioners.

**About the book** (this is an excerpt from Mario Bunge’s *Preface*)

This book has been written for social scientists curious about philosophy, as well as for philosophers interested in social studies. As suggested by its title, it focuses on the philosophy involved in social studies –albeit, usually in a tacit manner. I will argue that all social studies, whether scientific or literary, are crammed with philosophical concepts, such as those of fact, system, process, theory, test, and truth. They also contain or presuppose some philosophical assumptions, such as that societies are (or are not) mere aggregates of individuals, that people can (or cannot) choose and act rationally, and that social facts can (or cannot) be studied scientifically.

Regrettably, most students of society rarely pause to examine the philosophical ideas they adopt. When they do, they often fall under the influence of philosophies that do not match the practice of contemporary social science research. Most of the philosophers who have paid attention to the philosophy in or about social science have held some or all of the following three theses: that there is a clear divide between the social and the natural sciences, there being no mixed or socio-natural sciences; that science and philosophy are mutually disjoint, so cannot learn from one another; that the philosophy of social science is the same as that of the natural sciences –or else that the two are utterly disjoint. I will argue that all three, and many more received opinions, are false.

I will examine some of the key philosophical ideas inherent in the social (and socio-natural) sciences, as well as some of the topical philosophical problems raised by them. Thus I will elucidate the ontological notions of event and causation, the semantics concepts of meaning and truth, the epistemological ideas of hypothesis and indicator, the axiological notions of value and utility, and the ethical concepts of right and duty. Il will also wrestle with such classical controversies as individualism versus holism, idealism versus materialism, subjectivism versus realism, rationalism versus empiricism, explanation versus understanding, and nomothetic versus ideographic sciences” (pp. 11-12).

**About the author**

Mario Bunge was born in Buenos Aires (Argentina) in 1919. After training as a physicist –doctorate in mathematical physics, Universidad Nacional de La Plata (1952), where he learnt atomic physics and quantum mechanics from Guido Beck, an Austrian expatriate who had been an assistant of Heisenberg–, he was professor of theoretical physics (1956-1966) and philosophy, which he taught at the University of Buenos Aires from 1957 to 1963. He was the first South American philosopher of science to be trained in science.

Driven to emigrate by the political situation of his native country, particularly due to his socialist leanings, Mario Bunge initially settled in Europe, then in Montréal, where in 1966 he joined the philosophy department at McGill University, and never looked back. His career as a researcher rapidly assumed international scope and led him on to countless activities as an editor, speaker, guest professor, learned society member, and recipient of honorary distinctions, etc.

As Michael R. Matthews –University of New South Wales, Sydney, Australia– underline, the unifying thread of Mario Bunge’s scholarship is the constant and vigorous advancement of the Enlightenment Project, and criticism of cultural and academic movements that deny or devalue the core planks of the project: namely its naturalism, the search for truth, the universality of science, rationality, and respect for individuals. At a time when specialization is widely decried, and its deleterious effects on science, philosophy of science, educational research and science teaching are recognized – it is salutary to see the fruits of one person’s pursuit of the ‘Big’ scientific and philosophical picture.

Mario Bunge was the Frothingham Professor of Logic and Metaphysics at McGill University until his retirement in 2011 and is now Professor Emeritus in Philosophy.

He is author of over 80 books (including many translations into several languages) and some 500 articles mainly in English and Spanish, cofounder with logician Hugues Leblanc of the Society for Exact Philosophy, Mario Bunge set himself a task as an epistemologist, achieving a synthesis of rationalism and empiricism (*Scientific Research*, 1967, new version: *Philosophy of Science*, 1999), and also as a generalist philosopher and creator of a complete system, thanks to his monumental 8 volume *Treatise on Basic Philosophy* (1974-89), in which he defended conceptions on materialism and humanism. In his own cutting style, his *Dictionary of Philosophy* (1999) –the first edition of the *Philosophical Dictionary*–, accurately conveys this thought. Advocate of a precise philosophy “offering axiomatic and formalized expression of concepts and theories” he no less supported original positions on moral thought and politics. He is also the author of *The Sociology-Philosophy Connection* (1991), *Finding Philosophy in Social Science* (1996), *Social Science under Debate. A Philosophical Perspective* (1998), *Philosophy in Crisis*: *The Need for Reconstruction* (2001), *Scientific Realism: Selected Essays of Mario Bunge* (edited by Martin Mahner (2001), *Matter and Mind. A Philosophical Inquiry* (2010), *Evaluating Philosophies* (2012), and *Medical Philosophy* (2013).

Mario Bunge is a member of the American Association for the Advancement of Science (from 1984) and the Royal Society of Canada (from 1992). He was awarded the Premio Príncipe de Asturias of Spain in 1982 and the John Simon Guggenheim Fellowship in 1971.

### Degrees

PhD in physico-mathematical sciences, Universidad Nacional de La Plata (1952)

Twenty honorary doctorates

Five honorary professorships

### Teaching and research areas

Theoretical physics

Ontology

Epistemology

Philosophy of science

Philosophy of technology

Philosophy of mind

Value theory and ethics

### Current research

Philosophy of the social sciences, philosophy of mind, and metaphysics

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**Critical reviews**

“A philosophical tour de force anatomizing social sciences for our time. Lucid, wide-ranging, tough minded, provocative, and deeply knowing, it is a fine successor to Ernest Nagel’s treatise of generations ago”.

Robert K. Merton

“This work should play a major role in guiding the course of the social sciences toward a much needed strengthening of its foundations, tasks, and responsibilities”.

B.B. Price, Massachusetts Institute of Technology

“This book is required reading to understand relations between philosophy and the social sciences”.

Bruce G. Trigger, *American Journal of Archaeology*

“Along with the sharpness and clarity of Bunge’s thought, the detailed name and subject indexes make this an excellent reference work for philosophers of science and for students and scholars in the social sciences who must deal with the philosophical minefields that litter their chosen disciplines”.

*Choice*

“[A] brilliantly argued book, easily the most impressive work of its kind to appear in many years. . . . [It] should be required reading for all advanced graduate students in the social sciences and philosophy”.

Martin F. Farrell, *Perspectives on Political Science*

“Bunge's reasoning is lucid and persuasive, as one might expect from an eminent philosopher of science and logic, and it is easy to agree that his syntheses provide a more realistic perspective [than those he criticizes]”.

Ann Branaman, *Contemporary Sociology*

“It is a brilliant and comprehensive exposition of the key issues that confront the philosophy of social science […]. [It] should be required reading for all students in the social sciences”.

Colin Wight, in *Philosophy of the Social Sciences*

“*Finding Philosophy in Social Science* provides a systematic introduction to basic concepts used in all social sciences, as well as a survey and critique of widely held philosophical doctrines and assumptions.

[…].

There will be much to disagree with for social scientists from various disciplines and paradigms, if only because **Bunge** leaves virtually no stone unturned. More important, here is a philosophy of social science that is at once critical and constructive, unified and systematic, rooted in a thorough and deep understanding of contemporary science in general and the specific philosophical problems of social scientific research in theoretical and applied disciplines in particular, clear on the distinctions between social science and social technology, and explicit about the indispensable role of ideology, politics and morals in social studies. In short, **Bunge’s** work constitutes a landmark contribution to the social sciences”.

Andreas Pickel, *Society*

“The unifying thread of Mario Bunge’s scholarship is the constant and vigorous advancement of the Enlightenment Project, and criticism of cultural and academic movements that deny or devalue the core planks of the project: namely its naturalism, the search for truth, the universality of science, rationality, and respect for individuals. At a time when specialization is widely decried, and its deleterious effects on science, philosophy of science, educational research and science teaching are recognized – it is salutary to see the fruits of one person’s pursuit of the ‘Big’ scientific and philosophical picture”.

MATTHEWS, Michael, School of Education,

University of New South Wales, Sidney, Australia

“In fact, systems thinking have always been characterized by its diversity. In this book, the major reference point for both mounting a critique of Luhmann’s approach and addressing pertinent questions in social theory and philosophy of social science will be the philosophical system –which I characterize as “emergentist systemism”– developed by the accomplished Argentinian-Canadian physicist and philosopher Mario Bunge.

But why Bunge? There are three chief considerations.

Firstly, Luhmann’s systems theory is well known for its borrowing of concepts and terms from natural science. Luhmann’s understanding and appropriation of natural science, however, is limited and highly selective. […]. By contrast, Bunge had been a trained physicist versed in mathematics and quantum physics, […] and has displayed an impressive command of natural science (e.g. biology) and what he calls biosocial science (e.g. psychology and linguistics). Consequently, Bunge’s writings have been well received among practicing scientists”.

Poe Yu-Ze WAN, *Reframing the Social*:

*Emergentist Systemism and Social Theory*

“[Il clarifie] les fondements philosophiques des sciences sociales, traquant les incohérences ontologiques et épistémologiques et proposant une vision unifiée des fondements de sciences sociales. Là aussi, il s’appuie sur son *Treatise*, dont il reprend et développe les volumes 5 et 6 tout en intégrant les 4 premiers volumes, ceux-ci constituant le socle des conceptions de Bunge, à savoir sa sémantique scientifique (qui articule et unifie les concepts sémantiques), son ontologie matérialiste et emergentiste, et son systémisme réaliste”.

Pierre Moessinger, *Revue européenne des sciences sociales*,

Université de Genève, Département de sociologie

**Knowing more on Mario Bunge and Social Science: Links**

BUNGE, Mario. 2000. “Ten modes of individualism –None of which works– and their alternatives”, *Philosophy of the Social Sciences* (London: Sage), vol. 30, n.º 3, September 2000, pp. 384-406.

[**http://www.fisica.net/epistemologia/BUNGE%20-%20Ten%20Modes%20of%20Individualism.pdf**](http://www.fisica.net/epistemologia/BUNGE%20-%20Ten%20Modes%20of%20Individualism.pdf)

BUNGE, Mario. 2000. “Systemism: the alternative to individualism and holism” *The Journal of Socio-Economics* (North-Holland), vol. 29, n.º 2, pp. 147-157.

[**http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.196.5414&rep=rep1&type=pdf**](http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.196.5414&rep=rep1&type=pdf)

BUNGE, Mario, “How does it Work? The Search for Explanatory Mechanisms”, *Philosophy of the Social Sciences*, Vol. 34, n.º 2, June 2004, pp. 182-210.

<http://www.gemas.fr/dphan/cosmagems/docs/socio/PhilosophyOfTheSocialSciences2004Symposium_2Bunge.pdf>

GILSON, Gregory D., “The Project of Exact Philosophy: An Interview with Mario Bunge, Frothingham Chair of Logic and Metaphysics, McGill University, Toronto, Canada”, *APA Newsletter*, vol. 06, n.º 1, Fall 2006, pp. 8-10.

[**http://c.ymcdn.com/sites/www.apaonline.org/resource/collection/60044C96-F3E0-4049-BC5A-271C673FA1E5/v06n1Hispanic.pdf**](http://c.ymcdn.com/sites/www.apaonline.org/resource/collection/60044C96-F3E0-4049-BC5A-271C673FA1E5/v06n1Hispanic.pdf)

MATTHEWS, Michael, “Mario Bunge: Physicist and Philosopher”, *Revista Electrónica de Investigación en Educación en Ciencias*, (Universidad Nacional del Centro de la Provincia de Buenos Aires, Argentina), vol. 4, n.º 1, febrero de 2009, pp. 1-9.

[**http://www.redalyc.org/articu1lo.oa?id=273320452002**](http://www.redalyc.org/articulo.oa?id=273320452002)

MATTHEWS, Michael, School of Education, University of New South Wales, Sidney, Australia.

[**http://www.springer.com/philosophy?SGWID=0-40385-19-1009621-0**](http://www.springer.com/philosophy?SGWID=0-40385-19-1009621-0)

MOESSINGER, Pierre, “À propos du dernier livre de Mario Bunge”, *Revue européenne des sciences sociales*, Tome XXXVII, mars 1999, n.º 113, pp. 125-127.

[***http://books.google.fr/books?id=Vd0WOEHDI2IC&pg=PA125&lpg=PA125&dq=mario+bunge+finding+philosophy+in+social+science&source=bl&ots=wleWfRQnjZ&sig=apYQh249Rm64xbbWLZp47LT4gSk&hl=fr&sa=X&ei=XgmkU8CQL8G60wWNz4BA&ved=0CD8Q6AEwATgK#v=onepage&q=mario%20bunge%20finding%20philosophy%20in%20social%20science&f=false***](http://books.google.fr/books?id=Vd0WOEHDI2IC&pg=PA125&lpg=PA125&dq=mario+bunge+finding+philosophy+in+social+science&source=bl&ots=wleWfRQnjZ&sig=apYQh249Rm64xbbWLZp47LT4gSk&hl=fr&sa=X&ei=XgmkU8CQL8G60wWNz4BA&ved=0CD8Q6AEwATgK#v=onepage&q=mario%20bunge%20finding%20philosophy%20in%20social%20science&f=false)

MOESSINGER, Pierre, *Voir la société*. *Le micro et le macro*, Paris : Hermann, 2008, pp. 258. [**Préface de Mario Bunge**].

[**http://www.unige.ch/ses/socio/moessinger/Voir.la.soc.Hermann.pdf**](http://www.unige.ch/ses/socio/moessinger/Voir.la.soc.Hermann.pdf)

PICKEL, Andreas, “Mario Bunge and Social Science”, *Grupo Bunge*, *Filosofía y Ciencia*: **[**Andreas Pickel: Trent University]

[**http://grupobunge.wordpress.com/2006/08/07/mario-bunge%C2%B4s-philosophy-of-social-science/**](http://grupobunge.wordpress.com/2006/08/07/mario-bunge%C2%B4s-philosophy-of-social-science/)

PICKEL, Andreas: *Between Social Science and Social Technology: Towards a Philosophical Foundation for Postcommunist Transformation Studies*, Trent International Political Economy Center, Working Paper 01/13.

[**http://www.trentu.ca/org/tipec/pickel13.pdf**](http://www.trentu.ca/org/tipec/pickel13.pdf)

WAN, Poe Yu-Ze, “Emergence à la Systems Theory: Epistemological Totalausschluss or Ontological Novelt*y”*, *Philosophy of the Social Sciences*, vol. 41, n.º 2, April 2011, pp. 178-210.

[**http://www.academia.edu/1229705/Emergence\_a\_la\_Systems\_Theory\_Epistemological\_Totalausschluss\_or\_Ontological\_Novelty**](http://www.academia.edu/1229705/Emergence_a_la_Systems_Theory_Epistemological_Totalausschluss_or_Ontological_Novelty)

**Mario Bunge en español**

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[**http://www.laetoli.es/14-biblioteca-bunge-editorial-laetoli**](http://www.laetoli.es/14-biblioteca-bunge-editorial-laetoli)

**GRUPOBUNGE. Filosofía y Ciencia**

[**http://grupobunge.wordpress.com/**](http://grupobunge.wordpress.com/)

**Mario Bunge**

[**http://mariobunge.com.ar/inicio**](http://mariobunge.com.ar/inicio)

**Fermín Huerta. Blog filosófico: Bibliografía de Mario Bunge**

[**http://ferminhuerta.blogspot.fr/2010\_03\_01\_archive.html**](http://ferminhuerta.blogspot.fr/2010_03_01_archive.html)

**Mario Bunge: artículos en el diario *El País* (Madrid, España):**

[**http://elpais.com/autor/mario\_bunge/a/**](http://elpais.com/autor/mario_bunge/a/)

**Mario Bunge: artículos en *Caffe Reggio*: *periodismo de opinión***

[**http://www.caffereggio.net/tag/mario-bunge/**](http://www.caffereggio.net/tag/mario-bunge/)

**MARTÍNEZ, Eduardo: “Mario Bunge: la filosofía no ha muerto, pero está gravemente enferma”, *Entrevistas 21* (Revista electrónica de ciencia, tecnología, sociedad y cultura), sábado 23 de abril de 2003.**

[**http://www.tendencias21.net/Mario-Bunge-la-filosofia-no-ha-muerto-pero-esta-gravemente-enferma\_a150.html**](http://www.tendencias21.net/Mario-Bunge-la-filosofia-no-ha-muerto-pero-esta-gravemente-enferma_a150.html)

**Mario Bunge: Conferencia sobre filosofía política [antes de la publicación de su libro *Political Philosophy. Fact, Fiction, and Vision*, New Brunswick, N.J.: Transaction Publishers, 2008. Versión española: *Filosofía política: solidaridad, cooperación y democracia integral*, Madrid: Gedisa, 2009].**

[**http://www.dailymotion.com/video/x78y1a\_el-escepticismo-politico-y-debate-p\_school**](http://www.dailymotion.com/video/x78y1a_el-escepticismo-politico-y-debate-p_school)

**BUNGE, Mario. “El auténtico socialismo renacerá de las cenizas del capitalismo”, *Sinpermiso*, 24 de mayo de 2009.**

[**http://www.sinpermiso.info/textos/index.php?id=2592**](http://www.sinpermiso.info/textos/index.php?id=2592)

**Bunge, Mario. “¿Existió el socialismo alguna vez, y tiene porvenir?”, *Lecciones y ensayos*, nº. 88, n.º 10, pp. 17-41.**

[**http://www.derecho.uba.ar/publicaciones/lye/revistas/88/lecciones-y-ensayos-88-paginas-17-41.pdf**](http://www.derecho.uba.ar/publicaciones/lye/revistas/88/lecciones-y-ensayos-88-paginas-17-41.pdf)

**Bunge, Mario. “Socialismos y filosofías”, *Sinpermiso*, 12 de mayo de 2013.**

[**http://www.sinpermiso.info/articulos/ficheros/MB.pdf**](http://www.sinpermiso.info/articulos/ficheros/MB.pdf)

**Mario Bunge. “La peligrosa moda del relativismo”, *La nación ocio*. Actualizado el 17 de noviembre de 2013.**

[**http://www.nacion.com/ocio/artes/peligrosa-moda-relativismo-filosofia\_0\_1378862147.html**](http://www.nacion.com/ocio/artes/peligrosa-moda-relativismo-filosofia_0_1378862147.html)

**Mario Bunge en Français:**

**Éditions Vigdor (Paris, France):**

**Livres disponibles en ligne :**

**BUNGE, Mario, “**[**Considérations d'un philosophe sur l'économique du néo-conservatisme (néo-libéralisme)**](http://dx.doi.org/doi%3A10.1522/cla.bum.com)**” in ouvrage sous la direction de Lizette JALBERT et Laurent LEPAGE, *Néo-conservatisme et restructuration de l’État. Canada - États-Unis - Angleterre*. Première partie : *Lectures du néo-conservatisme* (pp. 49 à 70), Montréal : Les Presses de l’Université du Québec, 1986, pp. 274 (Collection Études d’économie politique).**

**BUNGE Mario : *La science, sa méthode et sa philosophie*. Inédit en français avec glossaire de l'éditeur : 500 notions et noms propres reliés au texte par 3000 liens hypertexte [3 Mo]. Mise sur le réseau Internet de la troisième édition révisée, octobre 2001.**

**BUNGE Mario : *Intuition et Raison*. Inédit en français, avec glossaire de l'éditeur : 500 notions et noms propres reliés au texte par 3000 liens hypertexte [4,50 Mo]. Mise sur le réseau Internet de la deuxième édition révisée, novembre 2001.**

**BUNGE Mario : « Une caricature de la science : la très nouvelle sociologie de la science ».), Article inédit en français [950 Ko]. Mise sur le réseau Internet de la deuxième édition révisée, novembre 2001.**

[**http://www.vigdor.com/titres/bungeLaScienceMetPhil.htm**](http://www.vigdor.com/titres/bungeLaScienceMetPhil.htm)

**Texte imprimé :**

**BUNGE, Mario, *Philosophie de la physique*, Paris : Seuil, 1975, pp. 299. ISBN 13 : 978-2-0200-2834-9.**

**BUNGE Mario, *Epistémologie*, Paris : Maloine, 1996 [1983], pp. 286. ISBN 13 :** **978-2-2240-0900-7.**

[**http://www.leslibraires.fr/livre/707459-epistemologie-mario-bunge-maloine**](http://www.leslibraires.fr/livre/707459-epistemologie-mario-bunge-maloine)

**BUNGE, Mario, *Matérialisme et humanisme*: *Pour surmonter la crise de la pensée*, Montréal : Liber, 2005, pp. 290. ISBN 13 : 978-2-8957-8041-0.**

**BUNGE Mario, *Le matérialisme scientifique*, Paris : Syllepse, 2008. pp. 216. ISBN 13 : 978-2-8495 -0145-0.**

**VACHER, Laurent-Michel: *Entretiens avec Mario Bunge*. Montréal: Liber, 1993. ISBN 13 : 2-921569-07-8.**

**JODOIN, Laurent, « L’héritage intellectuel de Mario Bunge : entre science et philosophie », *Philosophiques* (Montréal, Canada), vol. 37, n.º 2, automne 2010, pp. 439-455. Article complet disponible en format « .pdf » :**

[***http://www.erudit.org/revue/philoso/2010/v37/n2/045191ar.pdf***](http://www.erudit.org/revue/philoso/2010/v37/n2/045191ar.pdf)