Review of “Scientific Realism: Selected Essays of Mario Bunge”

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Being asked to review a book like this one is somewhat akin to being invited to someone else's family reunion -- and then handed the microphone and being asked for your opinion, not only of the event, but of all the various family members to whom you have just been introduced and the patriarch who has made it all possible.

This selection of Bunge's work covers a lot of ground -- ground carefully selected not only by the editor (and colleague of Bunge), but by Bunge himself, whom we are told has written and revised many of the pieces specifically for this anthology.

A total of thirty essays in nine categories are included, on: metaphysics; methodology and philosophy of science; philosophy of mathematics; philosophy of physics; philosophy of psychology; philosophy of social science; philosophy of technology; moral philosophy; and finally social and political philosophy.

Published to mark Bunge's 80th birthday, this book provided the opportunity for Bunge to select which of his ideas to highlight for the future generations of scholars and teachers unable or unwilling to plough through the myriad publications of a prolific scholarly career, a selection in which Mahner is obviously complicit.

So, like the unfortunate guest at the family reunion, I need to distinguish certain areas for comment, and phrase that commentary very carefully.

I want to consider the book's pedagogical value; its success as an anthology in depicting Bunge's "unified and unique perspective"; and finally offer some opinions on what is included. I will not presume to assess Bunge's place in either history or philosophy, leaving that judgment to others.

In the first instance, the pedagogical value of this book is unfortunately limited -- limited, I think, to a course on Bunge's philosophy. The points of view expressed for the most part ignore the ideas of other scholars, and while I know Bunge is engaged in a conversation, there is little evidence of this in the majority of the papers. The absence of notes is crippling, and the bibliography is sufficiently general to be of little help in the context of teaching, say, the philosophy of science.

In large part, these deficiencies are a consequence of Bunge's magisterial style, not of Mahner's editing (though he could have annotated the papers). The result is that one has a book designed for, and
appreciated by, disciples of Bunge, rather than a text that fits into the readings for an undergraduate course, allowing the student to understand the philosophical conversation and appreciate Bunge's unique contributions.

In the second instance, I think Mahner (with Bunge's help) has selected among the thoughts of a lifetime a representative and coherent assortment. Bunge's decision to write, revise or edit many of the pieces to fill in the inevitable holes was both wise and fruitful. Mahner's succinct narrative table of contents is useful, providing a rationale and connection between succeeding pieces that is not always possible on the basis of their content alone.

My quibble with this aspect of the book is that while the sections are internally consistent, I was not always convinced that one section led to the next -- especially in sections seven through nine, moving from the philosophy of technology to moral philosophy and then to social and political philosophy. Less emphasis on "presenting the system" would have meant less concern about tying things off in such a neat package -- something to be expected, after all, when the patriarch is still alive, working, and continuing to contribute.

In the third instance, with respect, I have to announce to the reunion that I am not a fan of the philosophical naturalism Bunge espouses, so I take issue with a host of his declamations. Bunge may well be "a paragon of realism and naturalism" (15), but the material presented here fails to convince me of the error of my ways. Focusing on sections two (Methodology and Philosophy of Science) and seven (Philosophy of Technology), the case for an unmixed materialism in either science or technology is not persuasive.

In section two, the first three papers argue some of the reasons for realism, instead of idealism, in science. Dating to 1977 and before, these papers would fit comfortably and unremarkably into the literature that preceded the work of philosophers like Ian Hacking, Larry Laudan and Nancy Cartwright in the 1980s. The fourth and fifth papers are neither a continuation of the first set, nor do they reflect particularly helpful contributions to debates that are still current. "The Power and Limits of Reduction" (1991) undercuts the value of reductionism in science, while baldly asserting its superior value (however this might be measured) to any anti-reductionist methodology. Neither approach strengthens the realist position. "Thinking in Metaphors" (1999) is a short, rather cryptic (dare I say metaphorical?) blast at those whose understanding of language has undercut the materialist and realist perspective in science, and it does not advance the debate in what is a critical area of the philosophy of science.

Similarly, in its three essays, the section on the philosophy of technology reflects more Bunge's idiosyncratic view of technology than a contribution to an on-going conversation. "The Nature of Applied Science and Technology" (1988) attempts an unhelpful distinction between two facets of what is essentially the same thing. "The Technology-Science-Philosophy Triangle" (1999) examines the philosophical commitments of "technologists" (a good thing) but then moves back into a naive realism that fails to recognize more complex epistemic and moral concerns, lampooning as "enemies of modern technology" Jacques Ellul (dismissed as a "theologian") and Martin Heidegger ("obscurantist pseudophilosopher") (358). "The Technologies in Philosophy" (1999) continues these lines of reasoning to the conclusion that ethics is a kind of philosophical technology, something that seems to put the epistemological cart before the horse.

Bunge's last essay in the volume ties the realist perspective to his understanding of technology and
bridges both to his view of politics and the future of society. It is too brief adequately to develop the term "technoholodemocracy" Bunge coins, and reads like a cross between texts on technocracy from the 1920s/30s and Ursula Franklin's wonderful set of Massey Lectures, *The Real World of Technology* (1989). While it is good to end on a positive note, it is probably the weakest piece in the collection. More could be said about Bunge's dismissal of anti-realism in the social sciences, and so on, but I will leave these areas for his other readers to evaluate.

On the whole, the book is worth its price to those interested in the work of Mario Bunge, and to those scholars wrestling with the nature of science in the modern world. But as for it being to science what Bernard Lonergan's *Method in Theology* was to religion, this account of Bunge's "system" is more valuable for its ascerbic insights than for its comprehensive depiction of the reality he claims to be the subject of modern science.

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Mario Bunge’s Causality and Modern Science is arguably one of the best treatments of the causal realist tradition ever to have been written, one that defends the place of causality as a category in the conceptual framework of modern science. And yet in the current revival of causal realism in contemporary metaphysics, there is very little awareness of Bunge’s work. This paper seeks to remedy this, by highlighting one particular criticism Bunge levels at the Aristotelian view of causation and illustrating its relevance for contemporary powers-based accounts. Roughly, the Aristotelian view depicts Mario Augusto Bunge (/ˈbʊŋɡə/; Spanish: [ˈbuŋxe]; Florida Oeste, September 21, 1919 – Montreal, February 24, 2020) was an Argentine-Canadian philosopher and physicist. His philosophical writings combined scientific realism, systemism, materialism, emergentism, and other principles. He was an advocate of "exact philosophy":211 and a critic of existentialist, hermeneutical, and phenomenological philosophy (especially Heidegger’s work), postmodernism, and feminist philosophy.:172 He was popularly known Selected Bibliography on the Scientific Philosophy of Mario Bunge. INTRODUCTION. “The Treatise encompasses what the author takes to be the nucleus of contemporary philosophy, namely semantics (theories of meaning and truth), epistemology (theories of knowledge), metaphysics (general theories of the world), and ethics (theories of value and of right action).Â Bunge, Mario. 1959. Causality. The Place of the Causal Principle in Modern Science. Cambridge: Harvard University Press.Â “This is an essay on determinism, with special emphasis on causal determinism -- or causality, for short. To some, causation and determination -- and consequently causalism and determinism -- are synonymous. Mario Bunge Scientific Realism. 1421. Like most realists, Bunge appeals to the standard abductive argumentthe achievements of the empirical sciences betoken a world out there. He recognizes that abductive argumentation is not logically rst class, however. This is not a deterrent from Bunge’s perspective.Â Every scientific quest for information focuses on just some aspects of the world, selected out of indefinitely many potentially available to us. Each scientific discipline looks for aspects that it considers relevant for the description, explanation and prediction of its intended objects. No scientist describes anything in terms of all the possible variables that might be relevant to it.Â Bunge agrees with critics of science that theories usually turn out to be erroneous as full proposals.