1. Introduction

In the last decades, doing ontology or metaphysics has become a respectable business again, even on the Anglo-Saxon philosophical scene. Professor Mario Bunge's system of ontological conceptions and theories fits into this trend. It fills two volumes (I, III), which form part of an ambitious seven-volume project, his Treatise on Basic Philosophy. It "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)" (General Preface to the Treatise, e.g. I v). Together with the previously published volumes on semantics (I, II), four volumes are available so far. Specifically, Bunge's philosophy is meant to be "systematic and, to some extent, also exact and scientific. That is, the philosophical theories formulated in these volumes are (a) formulated in certain exact (mathematical) languages and (b) hoped to be consistent with contemporary science" (e.g. I v).

The relationship between science and his ontological theories is intended to be especially tight: not only are they to be consistent with science, but "moreover rather close to science - or rather the bulk of it" (I xiii). This close relationship is not a fanciful notion, but rather already present in the fact that "every scientific theory, if extremely general, is ontological; and every ontological theory, if exact and in tune with science, is scientific" (I 21, also 15f.). 'Exact' and 'scientific' are not identified: "the latter implies the former but the converse is false" (I 8). Further, exactness is not an end in itself, but "a means to attain clarity, systemicity, cogency and testability" (I 9).

Scientific ontology, then, consists of general or cross-disciplinary theories which are to be consistent and linked with each other (I 9, 11, 24). A rough recipe for how to build them reads as follows: "take the rich legacy of ontological problems and hints bequeathed us by traditional metaphysics, add to it the ontological presuppositions of contemporary scientific research, top it with new hypotheses compatible with the science of the day, and elaborate the whole with the help of some mathematical tools" (I xiii). The resulting theories are ontolo-

gical inasmuch as they involve ontological categories (01 10). Sometimes, Bunge says, he can offer only ontological frameworks instead of theories proper, hypothetical-deductive systems (01 11). Such a framework, for which Bunge gives a detailed definition (01 12; also SI 57), can be a heuristically guiding matrix for any number of fully articulated ontological theories.

The theories or frameworks expounded in *Ontology I: The Furniture of the World* deal in successive chapters with the categories of substance, form, thing, possibility, change, and spacetime. The volume also contains an introduction which is important and helpful for an overall understanding of Bunge’s enterprise. The introduction offers concise discussions of (scientific) ontology, its characteristic problems, its possibility, its method and goals, its relation to formal and factual sciences, its uses as well as a list of metaphysical hypotheses occurring in scientific research and a list of general rules of exact and scientific philosophizing. The companion volume, *Ontology II: A World of Systems*, deals with the qualitatively differentiated ontic genera to be found in our world. This is done in a unified way within a systems-theoretic framework. The topics taken up in successive chapters are: the general concept of a system (distinct from that of a thing), chemism, life, mind, society and, in the form of concluding generalizations, a systemic world-view. There also are two valuable appendices, which offer surveys and philosophical discussions of system models and change models, respectively.

Patently, these topics form a spectrum of tremendous breadth, testifying to the extent of the author’s erudition and philosophical experience. Understandably, I shall not be able to do full justice to the sum and total of Bunge’s ontology. Besides, I shall feel free to follow my critical disposition, since Bunge stresses himself that “there is much room for improvement and of course also for divergent developments” (01 xiv). (Actually exploring alternative theories is beyond the scope of my review). None of my critical remarks, however, can subtract from the fact that anyone interested in ontology and science will have to come to terms with Bunge’s ontological system, with its riches of ideas and the ways they are elaborated.

2. *Aristotle, Exactness, Abstractness, and the Continuity with Science*

As regards central and substantive ontological assertions, Bunge’s views are closer to those of Aristotle than to any other major metaphysical view. Both advocate an ontology of things, analyzable into material substance and form (01 26, 103), although Bunge tries to combine such a view with a contemporary scientific version of atomism at the most basic level (01 35, 83f.); correspondingly, both intend to steer a middle course between idealism (or Platonism) and nominalism, though Bunge shows some tendency towards giving nominalistic answers to various central philosophical problems; both hold that possibilities are real (01 213), and that change presupposes its possibility (01 164, 179); for both, motion