Few arguments of philosophical significance are initially offered in a precise and manageable form and thus many must be recast in order to be properly and rigorously evaluated. This volume is a collection of arguments about ethical issues from newspaper and magazine columns, letters and advertisements. The collection of "everyday" arguments is unusual but very helpful, since this is the type of argument most often encountered and most often thought about. The job of the reader is to adequately reconstruct and evaluate the arguments.

The topics to be considered in an ethics course must be chosen with some care. They ought to be immediately seen to be ethically important, but not of such intense personal relevance that reflective and critical thought is swamped by an already-established opinion. In this respect some of the arguments contained in this book may be too volatile (such as certain ones on abortion, race prejudice and sex), but the list of topics is impressively large and some that are appropriate are in this book. The long segment on military service, the draft and related issues seems like a good candidate for being relevant but not overpowering. So do the sections on big business (although the balance would be improved with additional arguments concerning big labor), civil disobedience, animal rights, pornography, and technology.

The introduction is good, but (necessarily?) too brief. It includes two sample evaluations of ethical arguments, and these are done well enough, but it would be helpful if there were more such sample evaluations. Additional examples would do two things. They would 1) exemplify additional elements of proper ethical analysis, and they would 2) provide examples of reconstructing arguments into their strongest, viable form. These two tasks are both necessary and largely independent.

The casting of an argument in nice logical form is an operation prior to ethical (or any other kind) of evaluation. Indeed, of the ten items which constitute a partial list of evaluative suggestions for ethical arguments that Baum and Randell list, seven of them are quite independent of any ethical considerations and apply to the reconstruction of any argument. In this respect the volume has definite value in any course where recasting of arguments is a principle goal. Many of the arguments can be put into several compelling forms, often in a deductive or an inductive structure with rather different premises. It should be remembered that the arguments are all on ethical topics, so if the course is also concentrating on another type of evaluation the volume will have less application. It might be quite useful in some introductory logic courses; its value will be limited elsewhere.

— Allen J. Harder


This 620-page anthology is designed to fill a gap in the materials available for teaching philosophy of science at the introductory level. The editor's intention was to provide a comprehensive and solid collection, yet one whose selections "do not presuppose any particular competence in philosophy, science, or technology." (xi) By means of an astute two-fold selection policy, Professor Michalos has been largely successful in achieving this goal.

On the one hand, each of the twenty-seven readings (with exceptions noted below) is individually comparative in character: several alternative solutions to a given problem are discussed by the author, in considerable detail, yet presupposing a minimal background in the subject. Carl Hempel's "Problems and Changes in the
Empiricist Criterion of Meaning,” John Ziman’s “What is Science?” and Henryk Mehlberg’s “Types of Scientific Laws” are typical of the essays chosen for inclusion on this basis. In this respect this text contrasts with B. A. Brody’s *Readings in the Philosophy of Science* (Englewood Cliffs: Prentice-Hall, 1970), whose contents are more technical, generally require a knowledge of both logic and several scientific theories, and each of which develops only one philosophical viewpoint.

Secondly, Michalos’ selection of articles emphasizes *breadth* rather than depth. This is not achieved in a merely superficial manner, however, by stringing together a variety of highly specialized investigations internal to one isolated discipline after another (e.g., quantum mechanics, evolutionary theory, or behaviorism, as was done to round out E. H. Madden’s reader *The Structure of Scientific Thought* [Boston: Houghton-Mifflin, 1960]). Instead, the editor has concentrated his selections around ten methodological or meta-scientific issues which are common to all fields of scientific research: the nature of scientific knowledge, the logic of discovery, types of scientific explanation, the nature and function of scientific laws, scientific theories, observations and meaning, induction and probability, the role of values in science, the social responsibility of the scientist, and the impact of science and technology on society. Teachers who feel this strategy must be excessively shallow would probably find the above-cited texts more suitable to their needs.

Several other features of the book enhance its basic pedagogical value. All materials are up-to-date: no article predates 1950, and several (by Bunge and Kordig) were apparently written or rewritten specifically for inclusion. The contents are well balanced, too. Positivistic contributions are solidly represented, but the student is given ample opportunity to become acquainted with the alternative analyses of Hanson, Feyera-
tions, not long-settled doctrines. Hence, this book is highly recommended for interdisciplinary "sciences-and-humanities" programs, and for introductory level courses in the philosophy of science (especially those normally followed by specialized studies in the philosophical problems of physics, biology, or the social sciences). It is even suitable for some survey courses at the community-college or high-school level (depending on the interests of the audience). Furthermore, the text permits great flexibility in creating a more narrow or advanced philosophy of science seminar, because it could easily be employed as a profitable background reader to supplement some other, highly-focused, treatise or collection of the instructor's choice. Gerald Holton's Thematic Origins of Scientific Thought (physics), Ronald Munson's Man and Nature (biology), or T. L. Beauchamp's Philosophical Problems of Causation come quickly to mind as possible companion volumes.

— T. R. Girill


What distinguishes these texts from other introductory texts and makes them both admirable works, is that they present philosophy in a rigorous way, actually formalizing many important philosophical arguments, strictly applying formal logic to questions of their validity and consistently introducing and applying the latest methods and findings of philosophical analysis, criticism and counterexample to the determination of the truth-values of the premises. The texts are largely similar in contents, methods, and aims, but differ somewhat in styles of writing and conclusions obtained.

Both texts begin with sections on logic and techniques of critical philosophical analysis. These sections both cover the nature of argument, the deductive/inferential distinction, validity and the nature of induction and various other concepts such as definition, the a priori, and analyticity. Olscamp's presentation is more extensive and detailed: he introduces the symbolism of propositional and predicate calculi, truth tables, exemplary deductions with a few examples of elementary valid inference patterns and the four rules of quantification. He has more on meaning and truth than do Cornman and Lehrer. But Cornman and Lehrer have material on inductive cogency and the lottery paradox Olscamp lacks. They introduce only a few valid patterns in propositional calculus and syllogistic logic and formalize most of their arguments throughout the book as valid arguments of the propositional calculus, leaving for discussion only the truth of the premises. This may seem a Procrustean bed for the range of arguments they deal with, yet it proves surprisingly comfortable. And it seems that Olscamp hardly makes much use of the symbolism he introduces at the beginning.

Cornman and Lehrer's book (hereafter referred to as PPA) is also dialectical and problematic in construction, while Olscamp's Introduction to Philosophy (ITP) is more expository, consisting occasionally of long stretches of historical narrative, e.g., the beginning of chapter eight on moral and legal justice. To interest people in philosophy it seems to me that PPA's problematic approach is the best: it presents philosophy as conflict, e.g., between the beliefs that we have some certain knowledge and skepticism, between free will and determinism, between the various theories of the mind-body relation and the difficulties of each. Philosophical interest begins in wonder, and wonder is much more stimulated by the presentation of conflict than, e.g., by historical narrative. (Olscamp's, too, it