Book Reviews

Critical Thinking: Evaluating Claims and Arguments in Everyday Life by Brooke Noel Moore and Richard Parker.
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Review by *J. E. Parks-Clifford*

The second edition of *Critical Thinking* continues the virtues of the first with the vices well reformed. The exercises, now updated from the first Reagan Administration to the Dukakis-Bush campaign, continue to be first-rate, providing material for any amount of discussion. The text the exercises illustrate and test now provides an accurate introduction to the major areas in informal logic/critical thinking. Although the chapters are of uneven quality, the whole provides more than enough material for a one-semester introductory course.

The third chapter, "Evaluating Informative Claims," belongs in my ideal informal logic text. The chapter begins with a clear, precise and usable rule for accepting claims presented without supporting arguments. Chapter Three then provides practical analyses for all the major notions in the rule: conflict, personal experience, expertise, and background information. These analyses include all the appropriate warnings about the limits of expertise and about the initial certainty and revealed problems of first-person experience and memory. The exercises test these analyses and their warnings from a variety of directions and then apply the rule as a whole. A good survey of reliable sources of information ends the chapter.

Chapter Five, "Nonargumentative Persuasion," ends with a counter to this survey, a section about misinformation and suppressed information that may occur, especially in advertising, but also in many of those same sources just cited as reliable—government publications, the news media, even reference works. This section complements the first part of Chapter Five on various techniques for biased presentation, both using emotionally loaded expressions (euphemisms and dysphemisms, for example) and playing with our habits and expectations in communication (loaded questions and downplayers, among others). If this chapter fails to reach the level of Chapter Three, it lacks only some discussion of those habits and expectations to provide a context for their misleading use, as an earlier chapter provided a background on emotive force.

The two chapters on inductive arguments, Ten and Eleven, also fall short in small ways. The problem of analogical arguments flows over from one of them to the other. The section titled "Analogical Arguments" in Chapter Ten deals officially with arguments from a claim about a sample drawn from a population to a claim about an individual member of that population. Chapter Eleven, on causal arguments, appeals to this section, then, to justify a more traditional analogical argument for transferring experimental results from rats to humans. To be sure, the basic section treats the standard issue of the balance of similarities and differences but does so in the discussion of whether the sample is representative of the population.

This problem does not detract from the discussion in Chapter Eleven to which it is incidental, for a student who works through the discussion of the various forms of experiments to determine causal factors comes away with the tools for an intelligent critical reading of at least popular reports of such experiments. The first half of Chapter Eleven, on causes of individual events, also distinguishes various arguments to causal claims in a practical way. Chapter Eleven does call the successful arguments, unique difference and common thread, "sound" without arguing that they are even valid (and, indeed, the acknowledged fallacy of assuming the same cause for repeated occurrences of the same event shows that common thread, at least, cannot be), but this terminological slip does not interfere (for students) with the careful exposition.

Problems with the notion of representative samples affect the first chapter on induction, Chapter Ten, not only in the section on "Analogical Arguments" but also in the

preceding section, on generalizations, arguments from sample to population. The discussion blends points about strictly controlled statistical surveys with points about informal samplings, where no care is taken to be representative but no obvious source of bias intrudes. As a result, the Fallacy of Small Sample comes out looking like only a special case of Biased Sample ("the bigger the sample, the more likely it is to be representative") even in statistical arguments. The Fallacy of Anecdotal Evidence appears as a special case of Small Sample, despite all the cases cited being not generalizations but rebuttals of generalizations. (The book takes no notice of the dialectical status—as primary argument, rebuttal or defense, say—of arguments, though this often serves as a valuable field mark for identification.)

The final section of Chapter Ten, on statistical syllogism, from population to individual member, does not involve sampling problems and runs smoothly. But again, it deals strangely with fallacies, making Appeal to Illegitimate Authority a statistical syllogism, rather than the mirror image of *Ad Hominem*. Or, rather, having reduced Illegitimate Authority to a statistical syllogism, which no one would accept if its suppressed premise ("less than 50% of the claims made by authorities on A about subject B are true") were exposed, the authors also call *Ad Hominem* a statistical syllogism. Their discussion makes no connection to the earlier one on *Ad Hominem*, which relied heavily on emotional force and the difference between rejecting and not accepting a claim. Despite these peripheral problems, this chapter succeeds as well as that on causal arguments.

The two chapters, Six and Seven, on "Pseudoreasoning," in which the other discussion of *Ad Hominem* occurs, succeed less well. The authors never very clearly characterize pseudoreasoning nor explain the principle for dividing the discussion into two chapters. Traditional fallacies form the bulk of the chapters even though fallacies are arguments and the chapters end the half of the book devoted to claims presented without arguments. To be sure, the chapters also cover some psychological persuasions which would never be presented as arguments and of which we are often not even conscious—selfish rationalization, for example. Irrelevance, which is not further explained, ties the fallacies to the self-delusions and separates them from "real arguments," taken up in the second half of the book. But fallacies other than those of irrelevance occur. Aside from listing together fallacies of the Appeal-to-(Emotion) format and from grouping some fallacies as special cases of others, the authors structure the list very little, not (as noted) mentioning role in dispute, or validity, or other common classifying features.

Yet, for all the surrounding terminological deficiencies, the discussion of each "pseudoreasoning" presents a usefully clear picture of the type and careful separation from superficially similar "real arguments." The authors distinguish Appeal to Belief from Appeal to Proper Authority, for example, and nicely distinguish the role of emotions in deciding what is true from their role in deciding what to do. The authors also selected a list of "pseudoreasonings" that most students will have heard frequently from their fellows and which teachers will hear frequently from their students (though each of us will miss a favorite or two, e.g., *Ad Ignorantiam*).

Several other chapters are fairly well written, and what they say is mostly correct and useful, but nothing distinguishes these presentations from the ordinary run of textbooks. Chapter One, "What is Critical Thinking," begins with the usual encomium to critical thinking as a practical discipline, encompassing logic but going beyond to look into the acceptability of unsupported claims. The chapter starts the process of clarifying claims and arguments by pointing to the importance of context—who makes the claim, to whom, for what purpose—and by introducing the key notions of relevance and the issue. Unfortunately, the authors discuss none of this very deeply: relevance is covered by a couple of examples, the issue is found by looking for the conclusion of an argument, and so on. Later chapters do not expand on this appreciably (as already noted), but the exercises often expect such expansions. Already in the first chapter, one set of exercises includes a performative utterance (a topic not discussed), requires being precise about what emotion or attitude one unknown person expresses about another equally unknown, and asks precisely what behavior one person tries to elicit from another by an apparently irrelevant general remark. These would be wonderful exercises in the context of a fuller discussion of uses of language, conversational conventions and implicatures, and notions like irony that derive

from them, but in the present chapter they only lead students to believe that critical thinking is hopelessly arcane or a trap to put them always in the wrong.

Chapter Two, "Understanding Claims," continues at this average level. Moore and Parker treat meaning and the related topics of ambiguity, vagueness, definitions, and analytic claims briefly and accurately enough, but the authors pass by interesting problems that might affect the exercises. For example, Chapter Two does not mention the vagueness inherent in using ostensive definitions, nor does it deal with the potential overlap between definitions by synonymy and definitions by genus and differentia or between syntactic and semantic ambiguity ("Women can fish"). The exercises do contain a number of examples of genuine ambiguity and vagueness, exercises that are neither jokes nor clearly resolved even in the limited context given, though some are barely intelligible to many students. The text also contains a good discussion of what to do with strange words, complex constructions and spoken presentations, all practical problems for students. And, for once, it gives fair warning that some problems are essentially insoluble—whether certain philosophic claims are analytic.

In much the same way, Chapter Eight, "Understanding and Evaluating Arguments," runs through the standard vocabulary and techniques briefly but accurately. The authors present a psychological distinction between deduction and induction, recognize that it fails, but then provide no alternative. The focus quickly shifts to the valid/invalid distinction and, within invalid, the strong-to-weak scale, defined in terms of an informal notion of likelihood. These notions guide the search for finding missing pieces of arguments. Finally, evaluation of completed arguments rests on whether the premises are acceptable and how well they support the conclusion. Unfortunately, the chapter does not explain how these factors work together toward accepting (or even evaluating) the conclusion.

Chapter Eight contains a brief sketch of a Thomas-style diagramming technique, with the usual problem about the nature of independent or dependent premises. Here two premises are said to be dependent if the fact that one of them is false destroys the support that the other gives the conclusion. But the previous discussion developed the notion of support as independent of the truth of the premises. In any case, although this is meant to be the introductory chapter on arguments, no subsequent chapter uses the diagramming technique nor virtually anything else from this chapter.

The discussion of deductive logic, if it were in a single chapter, would be on the same mediocre level as the chapters just discussed. However, Chapter Nine, "Common Patterns of Deductive Arguments," rates much lower. The chapter deals with only a score of argument forms: eight pairs of a valid argument and a closely related invalid one plus the four categorical conversions, two valid and two not. The chapter also introduces RAA as a form of indirect proof, without discussing what direct proof might be (and accepting any "obviously false" claim as a sufficient stopping point). The exercises require rewriting sentences into standard form, but the chapter deals only with "only if" and that in a box of the sort usually reserved for illustrative anecdotes (which students skip). The exercises also contain two insolubles: a two-step argument in the section designated as single-step and an argument in the more complex set which involves an argument type not discussed (indeed, not treated even later, if we try to connect with the patterns given in the most natural way). Happily, the appendices on Categorical Logic and Truth-Functional Logic make up many of the deficiencies.

Appendix One, "Categorical Logic," gives a brief but thorough introduction to the terminology of traditional syllogistic and a practical sketch of the Venn diagram test for validity; it also lays out the distribution test clearly enough for a student to use. This appendix lacks only a discussion of translation into standard form (what to do with "only," for example) to be an exemplary short course in syllogisms as arguments, though it says nothing about the systematic approach.

Appendix Two, "Truth-Functional Logic," begins, like the Categorical appendix, with the claim that truth-functional logic was invented in the 19th century. Like the previous appendix, Two also presents a tabular validity test, full truth tables. A second test, short-form tables, is mentioned in passing but not developed to a useful technique. Unlike the previous appendix, this appendix does give some attention to translating to standard form, including a very good short justification for the standard treatment of "only if." Appendix Two also attempts

the rudiments of a systematic approach by giving a set of rules for deriving conclusions from premises. The old- fashioned system has 18 rules (many of them doublets) and uses only direct proof, although the main chapter discusses indirect proof. This system makes finding derivations the problem rather than a tool for treating other problems about arguments; using this system would not do as a recruiting device for a formal logic course. A good exposition of truth trees would have resulted in an appendix more in line with that for categorical logic and more useful generally.

Only two chapters fall below an acceptable level: Four, "Explanations," and Twelve, "Moral Reasoning." The chapter on explanations does not contain any distinctions within the general term. Although it deals mainly with explaining why, the section on analogies in explanation covers some cases of explaining how, without noting a difference. One good section warns about the difference between explaining (why) and justifying what happens, though fails to make a sharp demarcation. On the other hand, the section on distinguishing explanations from arguments fails to make a clear distinction. The one based on what the hearer believes beforehand crashes on cases the authors say are both arguments and explanations. This section also gives no clue why anyone would have confused explanations with arguments, no pointing to the common forms of expressing—and talking about—both arguments and explanations. The three types of explanations listed—causal (or physical), psychological, and functional—are not exhaustive and tend to fade into one another in practice. In my classes, the most fruitful product of using Chapter Four has been students' attempts to justify non-standard answers about the type of explanation involved, playing on the vagueness of the definitions given. Finally, the nine tests for an adequate explanation make a mixed bag of very general and very specific tests without an overriding guide for applying them in particular cases. The argument to the best explanation should involve something a bit more organized.

The chapter on moral reasoning, Twelve, also fails to come up to even a moderate standard. Although moral reasoning may not be a special kind of reasoning, parallel to induction and deduction, it does encompass a number of characteristic patterns of arguments; the exercises in this book contain a number of ends-means arguments, to begin with. However, this chapter presents only the questionable, low-level instruction to expand an argument of the form "x is an F, therefore, x should be a G" by adding the premise "Every (most) F's should be G's." In the process of instructing, the chapter expands on an earlier, brief discussion of a special type of claim, the prescriptive claim. None of the discussion relates this type of claim clearly to other types of claims. Indeed, much of what is said suggests that prescriptive claims are more closely related to non-claims like commands or interjections, though not enough is said to deal with the philosophical issues of the nature of value language. The chapter also introduces the principle to "Treat relevantly like cases in relevantly similar ways" as a general principle of both morality and reason, but lacking a good discussion of either relevance or similarity, the authors can show little practical use for this principle nor make its foundational status plausible. In any case, the expected discussion of moral analogical arguments does not appear.

The book ends with a good appendix, "Writing an Argumentative Essay." This provides a concise review and checklist to supplement a logically oriented composition course. Together with the essay questions in each chapter of the book, this appendix strongly supports writing across the curriculum.

Through all this flurry of criticism of details, *Critical Thinking* emerges in its second edition as among the best elementary surveys of the topics and techniques of informal logic. Its quality rarely falls below the norm and several times rises clearly to the top. Its exercises are excellent. Further, *The Logical Accessory*, the teacher's handbook, adds enough exercises for each section to make that section a major focus of a course, while providing adequate answers and explanations for the exercises in both books. Finally, the publisher, Mayfield, has provided excellent support through an occasional mailing, *CT Flea Market*, noting and correcting errors as they are found, adding new examples as they appear in everyday life, and expanding discussion of topics touched on in the text. The whole package excels.

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