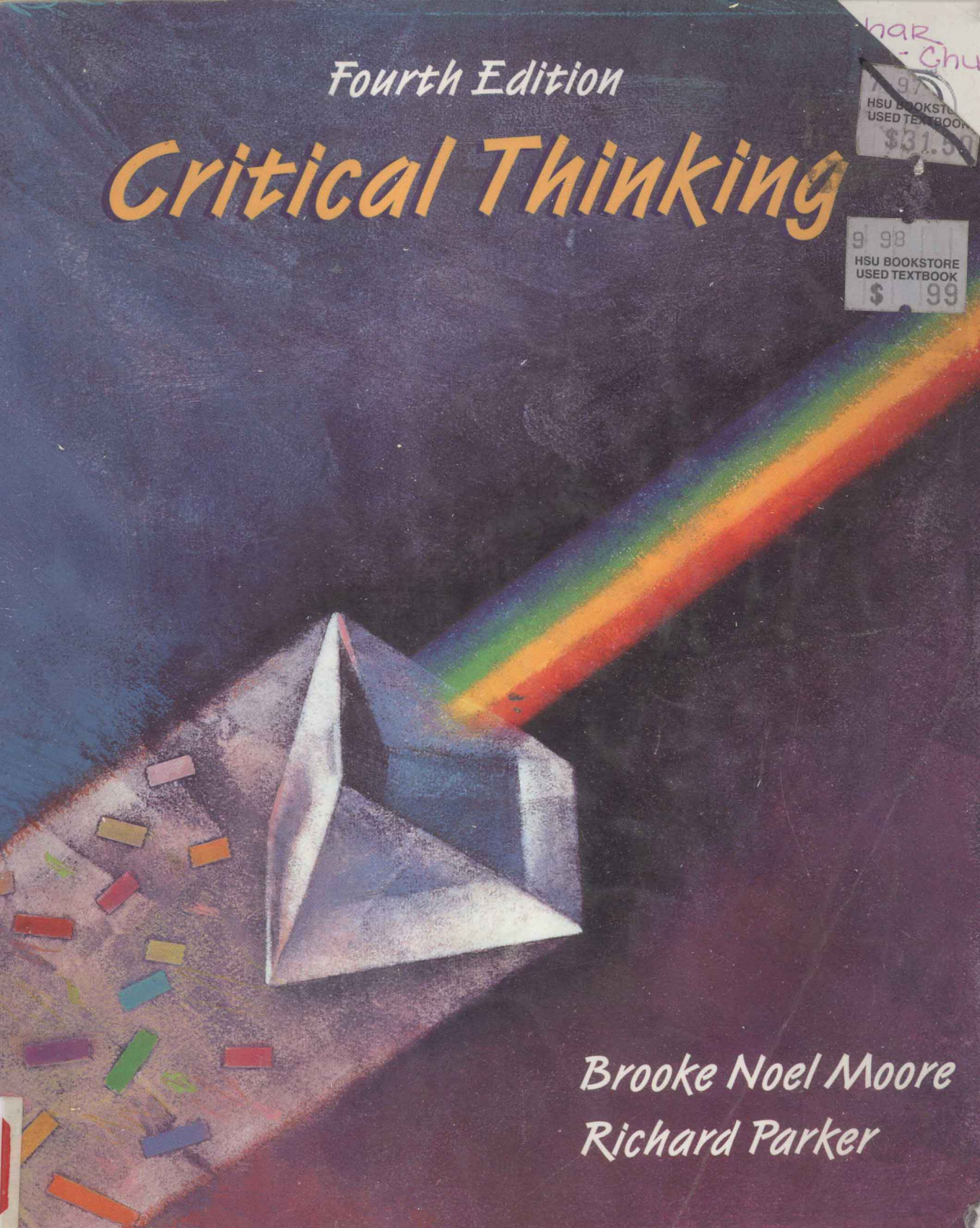
Fourth Edition

Critical Thinking



Brooke Noel Moore
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Fourth Edition

Critical Thinking

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Chapter 13
by Nina Rosenstand and Anita Silvers

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To Alexander,

Bill,

and Sherry

Preface

YOU'D THINK WE'D HAVE DEBUGGED THIS BOOK BY NOW AND THERE would be no need for further editions. However, readers keep suggesting ideas for improvement, and we keep stumbling across ideas for improvement and things that need fixing as we use the book in our own classes. A couple of our experiments in the third edition didn't work as well as we'd hoped. And the illustrative material once again needed freshening; our editors worried that incoming university students might not have heard of Walter Mondale, Michael Dukakis, or the invasion of Grenada. Finally, as usual, our professional reviewers, who get paid to find problems in the book, found some that we were not aware of.

Not that it's always easy to know just what should be changed. Our reviewers agree on some things, but not much. One reviewer told us to leave Chapter 11 as is; another, however, assured us that that chapter had to be completely overhauled. Two reviewers told us that the chapter on explanations was overtly beside the point and ought just to be removed; another, however, warned us not even to think about dropping the chapter from future editions, since it was his main reason for adopting the book. We cannot please everyone, as you can see.

Introducing new illustrative material brings its own set of complications. We monitor Bill Clinton and Al Gore pretty carefully; but the two just don't seem to have their predecessors' knack for assembling words and sentences in inventive ways. Then there is the problem of obtaining new copyright permissions. "THERE IS NO ONE AVAILABLE AT THIS NUMBER TO

ANSWER *ANY* QUESTION," the voice on the answering machine reprimanded us sternly. "*THE WEEKLY WORLD NEWS* RESPONDS ONLY TO INQUIRIES IN WRITING, AT THE ADDRESS LISTED ON PAGE 6 OF *THE WEEKLY WORLD NEWS*. PLEASE, *PLEASE* DO NOT WASTE ANY MORE OF YOUR TIME OR YOUR MONEY CALLING THIS NUMBER AGAIN. YOUR CALL WILL NOT BE ANSWERED." (After wondering how this number is better than no number at all, we did succeed in reaching *The Weekly World News* by letter.)

Unfortunately, when you place new material in a book, you always insert with it a new supply of minor errors. And—despite the prodigious effort of the Mayfield proofreaders SWAT team—some of the mistakes carry over into print. Especially vexing to us is when the answer to Exercise Question 7 somehow becomes attached to Exercise Question 1, making us look like idiots and endangering the lives of unwary instructors. For this edition we commissioned our good friend Dan Barnett to make sure the exercise answers seem at least related to the exercise questions.

So . . . is the big difference between this and previous editions that this one contains a fresh batch of mistakes? By no means. There are some real improvements here. Moreover, they've all been made consistent with our abiding philosophy of avoiding alterations so radical that you'll have to make wholesale adjustments to your courses.

Changes in the Fourth Edition

Here are some of the most important changes:

- We've included a set of short essays at the end of the book for discussion, analysis, and good, clean fun. Some of the essays are easy to criticize; others are more difficult. Some contain rather gross illustrations of critical thinking fallacies; others are pretty subtle. All are interesting to read, and most will stimulate animated class discussion. We've made some specific suggestions about what can be done with them, but an always-useful strategy is to ask students to write rebuttal essays. We figure you'll know best how to make them useful for your students.
- Reviewers generally agreed that our discussion of fact versus opinion was valuable but needed adjustment. The new, improved version can be found in Chapter 1. The distinction is one that needs to be made early and clearly.
- Several minor conceptual glitches have been cleared up, we hope. One enduring source of controversy has been our (psychological) treatment of the induction/deduction distinction, which is made in Chapter 8. In this edition we downplay the practical significance of the distinction and

give you more room to draw the distinction as you wish to draw it. Some may wish not to draw it at all, which is entirely feasible given its new treatment.

- ▲ Nina Rosenstand and Anita Silvers have contributed an excellent discussion of value-related reasoning. See Chapter 13.
- ▲ The chapter on explanations has been heavily revised and moved to a new and, we think, much better place (it's now Chapter 7). If you are one of the instructors who haven't used the material before, we urge you to have a look at it. The distinction between arguments and explanations is subtle and confusing but inestimably important. We've had good luck using the approach taken in this edition.
- ▲ As mentioned above, illustrative material has been updated for this edition. Ross Perot and Rush Limbaugh now line up for their fair share of whacks; changes in world politics and economics are reflected in this edition, too.
- ▲ Exercises have been updated and expanded. If some of your favorites seem to be missing, they probably still can be found in *The Logical Accessory*, the instructor's guide to the book.
- ▲ It's too bad that some composition texts seem to encourage pseudoreasoning. We do our best to distinguish, at the appropriate places, between writing that is *effective* in swaying an audience and writing that is *sound*.
- ▲ The section on vague comparisons, after life as a transient for the past two editions, has a new home in Chapter 2, which deals with vagueness. That's where it belonged all along, we suppose.
- ▲ In Chapter 5 we emphasize the difference between *having respect* for other people's opinions, which is only civilized, and *refusing to question* those opinions, which is naïve.
- ▲ We've introduced a couple of important types of pseudoreasoning that were missing from previous editions: We call them the Line Drawing Fallacy and the Perfectionist Fallacy. The first appears in Chapter 2, where it is linked to vague concepts; both appear in Chapter 6. We've made the Line Drawing Fallacy a species of False Dilemma; others have treated it as a version of Slippery Slope. We think our way of dealing with it better fits the way students actually run across it.
- ▲ Our previous discussion of Burden of Proof was too abbreviated and perfunctory for what we have come to realize is a truly crucial subject. While it probably merits a chapter (or a book) on it's own, we hope you'll find our newly expanded treatment an improvement.

- ▲ We have the same hope for the new treatment of Begging the Question.
- ▲ We've revised and expanded our discussion of identifying unstated premises. It's in Chapter 8.
- ▲ There remains some controversy about the relationship between analogical arguments and inductive generalizations. We continue to think our analysis of this relationship is correct and also makes sense pedagogically. We've tried yet again to make our discussion of the subject clearer this time around. See Chapter 11.
- ▲ Also in Chapter 11 we've included a box on Simpson's Paradox, which is perhaps better known to statisticians than to critical thinking instructors; but all you'll need to know about it is contained in the chapter. It's really just plain common sense. We've also added some notes on what we call the "law of large numbers" and other matters that relate especially well to gambling. We wouldn't encourage such activity, naturally, but the material is really fun to teach.
- ▲ We've tinkered a bit with the section in Chapter 12 on spotting weak causal arguments.
- ▲ Finally, the previous edition's streamlined section on common patterns of valid and invalid deductive arguments has now been moved to an appendix. Many instructors feel that these patterns are easier to learn and remember once students have basic instruction in deductive logic, which they get in Chapters 9 and 10. Other instructors, including one of us, prefer just to teach the common patterns and dispense with the ground-up instruction in deductive logic. Both interests seem well served by moving the material to an appendix.

Distinguishing Features of This Text

These being most of the important changes, we'd like to repeat briefly what we see as the virtues of this text in general:

Focus

Critical thinking encompasses a variety of deliberative processes aimed at making wise decisions about what to believe and do, processes that include more than just evaluation of arguments. The best way to teach critical thinking is to integrate logic, both formal and informal, with a variety of skills and topics useful in making sound decisions about claims, actions, and practices—and to make it all palatable by presenting it in real-life contexts. This book is informal in tone; some might even say light-hearted. The illus-

trations, examples, and exercises are all taken from or designed to resemble material that undergraduates will find familiar. We are confident that first- and second-year college students will not be overwhelmed by the material and will benefit from it.

Organization

Some real-life claims are supported by attached arguments, and some are not. One part of the book deals mainly with unsupported claims and the various nonargumentative and quasi-argumentative ways they are urged upon us; another part deals mainly with genuine arguments.

Alternative Teaching Strategies

If you want to teach a more traditional course in logic—as one of us sometimes does—you can cover Chapter 1 and parts of Chapter 8, then work through Chapters 9 through 12. In whatever time remains, if there is any, one can take advantage of some of the material in Part 2—for instance Chapter 4, which deals with nonargumentative techniques of persuasion. Speaking of which: We used to be puzzled by the difficulty of applying the principles of logic to letters to editors, family discussions, and articles in opinion magazines. By degrees it became clear that nonargumentative techniques play a much greater role than we had realized in the attempts people make to persuade each other. Adding this material to a traditional class in logic can add a powerful practical dimension to the course.

On the other hand, if you are like the other author and do not desire to teach elementary logic from the foundations up, then you may skip Chapters 9 and 10, which give rather complete treatments of categorical and truth-functional logic.

Writing

If you teach critical thinking within a basic writing course or teach basic writing within a critical-thinking course, you can adapt this book to your needs. Chapter 2 in particular is devoted to subjects related to writing argumentative essays. At the end of the book is a collection of essays that you can use for a variety of writing assignments as well as for exercises in critical thinking. For example, we have our students write letters-to-the-editor in response to items in the collection. You'll find essay topics in the exercise sections of each chapter, too.

Pseudoreasoning

Chapters 5 and 6 deal with pseudoreasoning—a large and diversified inventory of irrelevancies, emotional appeals, and persuasive devices that all too often induce people to accept or reject a claim when they have no good

reason for doing so. These chapters help students distinguish weak reasons from irrelevant considerations, a subtle but important distinction. The various types of pseudoreasoning can be treated as informal fallacies; we've included many of the traditional fallacy names in our scheme.

In these chapters the emphasis is not on the usual classification of feelings or emotions to which appeals are made; rather, it is on the relevance of the appeal to the issue at hand. Some will ask how you tell if the appeal is to prejudice, patriotism, or pity. Our response is that the distinction is not too important. What counts is the relevance of the appeal to the issue under consideration, and it is on this question we must spend our energy.

Exercises

The exercises in this book do considerable work. There are more than a thousand in the text and many more in the accompanying resource guide, *The Logical Accessory*. Your decision about how to use the exercises will help determine the nature of your course. Some of the exercises can serve as assignments that can be quickly graded; others are better used as a basis for classroom discussion. Still others might be used for short quizzes. Bulleted questions are answered in the answer section in the back of the book (easier to find now, with colored page edges), and sometimes discussions that extend material in the text proper are found there. We've had very good response to the "goodies" that turn up back there. Instructors may find the section useful as a direct teaching aid or as a foil for their own comments.

The Logical Accessory: Instructor's Resource

The Logical Accessory contains a lot else besides answers to exercises not answered in the text. Practical suggestions for teaching the material are offered there, as well as suggested topics for lectures or discussions that take the material in new directions. The *Accessory* also contains quizzes for each chapter, a pre- and post-course examination, and a bank of hundreds and hundreds of additional exercise/examination questions, all with answers. Finding and inventing exercises is seldom fun; we hope those we have provided will help relieve you of much drudgery.

Additional Features

This book isn't short, and it is possible to overlook some of its features by just flipping through it. Among the features that you may find useful are these:

- A discussion of the importance of writing in ways that don't reinforce dubious assumptions and attitudes about ethnicity and gender—with exercises designed to help students develop skills in writing in unbiased language.

- ▲ A glossary at the end of the book that provides students with definitions of key terms.
- ▲ A treatment of statistical studies designed for individuals more likely to encounter media reports of such studies than the studies themselves.
- ▲ Critical thinking across the disciplines: discussions of moral, legal, and aesthetic reasoning.
- ▲ A serious treatment of causal arguments that avoids tedious discussion of Mill's methods and recasts key concepts in accessible language.
- ▲ An account of analogies used as explanations and in arguments.
- ▲ A treatment of credibility, authority, and expertise.

Not everyone will wish to cover all topics presented in the book. Topics can be selected to accommodate each instructor. There are as many ways to combine the topics as there are creative instructors of critical thinking.

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