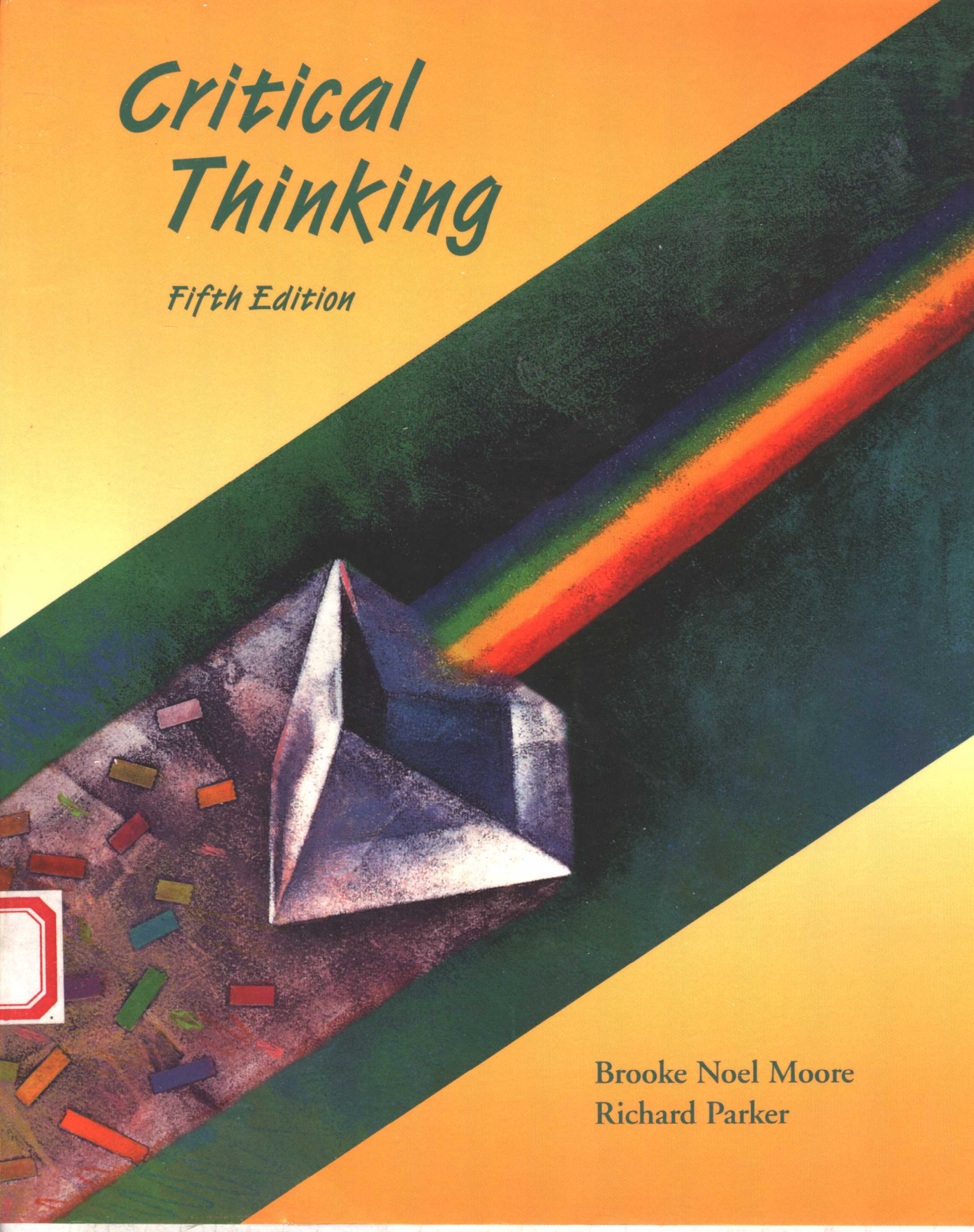
Critical Thinking

Fifth Edition



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Fifth Edition

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Preface

As we're doing the final work on a new edition of *Critical Thinking*, it's difficult not to be preoccupied with the host of last-minute details that present opportunities to go wrong. There are typesetter's errors to catch, acknowledgments not to misplace, and permissions to secure—never mind answers in the back of the book and in *The Logical Accessory* that have to be re-coordinated with the exercises in the text. These and a multitude of items must be done or finished in a flurry of activity to meet production schedules. On the other hand, we're always surprised when we don't find corrections we're just positive we've made. For years, colleague Anne Morrissey nagged us to get rid of a particular example ("Horatio plays his trumpet by ear."). Edition after edition, we were certain we had deleted the item—yet when each new edition came out, the example was always there. So, despite our best efforts and those of numerous readers, we can hope for (but not promise) an error-free fifth edition.

But enough. The bright side is that we are confident you'll notice some definite improvements in this edition of the book. So we'll cross our fingers about the typos and get on with telling you about the changes.

Changes to the Fifth Edition

- We've revised the discussion of facts and opinions and the discussion of subjective and objective claims.

- In this edition, we've made a distinction between issues and topics of conversation.
- We've provided strategies for writing an argumentative essay that is persuasive. We still don't think many composition teachers—or the world at large—make enough of the distinction between "persuasive argument" and "sound argument." One text we know states that there is no difference!
- At long last, we've given explicit definition to the concept of a good argument.
- We've given some grounds for the practical value of formal logic.
- You'll also find a section on opinion polls.
- We've added material, long overdue, on moral relativism and subjectivism.
- In addition, we examine the main justifications for legal interference with liberty, including the harm principle, legal moralism, legal paternalism, and the offense principle. If you don't usually teach Chapter 13, the changes in the chapter may make you want to try.

And that's not all. We've:

- added new classroom-tested writing exercises that are fun to do and easy to grade;
- updated examples, illustrations, boxes, and sidebars to reflect current social and political issues;
- added still more exercises to both the text and the instructor's manual;
- provided some practical, classroom-tested advice on teaching writing in a course on critical thinking (in the instructor's manual);
- included some new essays for analysis in the back of the book.

Interactive Student Support Material

- Maybe most important of all, a brand-new student Study Guide comes out with this edition. Written by Nickolas Pappas of the City College of New York, it contains answers to the questions students ask most frequently about each chapter, answers to some exercises, and some new exercises to boot.
- And don't forget Dennis Rothermel and Greg Tropea's text-review software, *CT Review*. Students who use it say it really helps them remember the material in the chapter.

Distinguishing Features of This Text

That being said, we want to repeat what we see as the virtues of this book.

Focus

Critical thinking includes a variety of deliberative processes aimed at making wise decisions about what to believe and do, processes that center on evaluation of arguments but include much more. We believe 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 say lighthearted. But it does not duck important issues. The illustrations, examples, and exercises are all taken from or designed to resemble material that undergraduates will find familiar. First- and second-year college students are not overwhelmed the way they are by many texts in this subject.

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 nonarguments and quasi-arguments that are urged upon us; another part deals mainly with genuine arguments.

Alternative Teaching Strategies

If you want to teach a traditional course in logic, cover Chapters 1 and 8, then work through Chapters 9 through 12. In whatever time remains, if there is any, take advantage of some of the material in Part 2—for instance, Chapter 4, which covers nonargumentative techniques of persuasion. Such techniques play a large role 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 do not desire to teach elementary logic from the foundations up, skip Chapters 9 and 10, which give pretty complete treatments of categorical and truth-functional logic.

Writing

If you teach critical thinking with 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 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. As already mentioned, you'll also find some new writing exercises that are fun to do.

Pseudoreasoning

Chapters 5 and 6 deal with pseudoreasoning—a large and diversified inventory of persuasive devices, emotional appeals, and irrelevancies that all too often induce people to accept or reject a claim when they haven't a 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 if you prefer.

Exercises

The exercises in this book do considerable work. There are more than a thousand in the text and many more in the accompanying Instructor's Manual, *The Logical Accessory*. Questions marked with a triangle in the book are answered in the answer section in the back of the book (easy to find, with colored page edges), and sometimes discussions that extend material in the text proper are also 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

Don't forget *The Logical Accessory*, which 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 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. We hope you won't forget 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 develop skills in writing in unbiased language.

- A glossary at the end of the book that provides definitions of key terms.
- A treatment of statistical studies designed for individuals more likely to encounter media reports of such studies than to read 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—it's very difficult to do in most circumstances. Topics can be selected to accommodate each instructor. There are as many ways to combine topics as there are creative instructors of critical thinking.

Acknowledgments

Moore still blames Parker for the errors in this book; Parker continues to blame Moore. Nobody should blame the many who have assisted us with suggestions, commentary, encouragement, and advice. We feel great gratitude toward our friends at Mayfield, whose ability to help is surreal: Ken King, April Wells-Hayes, Kate Engelberg, Martha Granahan, Susan Shook, and Beverley DeWitt. Those who have assisted us, and to whom we are especially grateful, include Don Fawkes, Tom O'Dell, Windy C. Turgeon, and Gerald Voltura. We thank, as well, the following people for their insightful perusal of the manuscript: Dasiea Cavers-Huff, Riverside Community College; Bobbie Coleman, Moorpark College; Laurie Cowan, DeKalb College; Joyce Dawson, Johnson & Wales College; Richard Eggerman, Oklahoma State University; Don Fawkes, Fayetteville State University; Lynne Fullmer, Southwest Texas State University; Sidney Leighton Moore, Emory University; Anne Morrissey, California State University, Chico; Dean J. Nelson, Dutchess Community College; Nickolas Pappas, City College of New York; Gregory P. Rich, Fayetteville State University; Matt T. Schulte, Montgomery College, Rockville Campus; Susan A. Wheeler, California Polytechnic University, San Luis Obispo; and Charles C. Worth, California State University, Chico.

Finally, we add our special thanks to Patricia Edelmann Parker and Marianne Larson.

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PART 1

Introduction

Chapter 1

What Is Critical Thinking?

We are a very smart bunch, we humans. We've figured out how to send spacecraft through the solar system and beyond. We've learned to identify, select, transform, and combine tiny bits of genetic material so as to alter the varieties of life on our planet. We've built computers that can solve problems and complete tasks in ways that were almost unimaginable just a few years ago.

On the other hand, we constantly come face to face with examples of human error, ignorance, oversight, and misjudgment. There's the woman in Chicago, for example, who tied knots in the cords of her lamps and electric appliances in the belief that it would cut down on the amount of electricity she used and thus help her save on her utility bill. Surveys indicate that almost half of all adult Americans believe that the Sun revolves around the Earth rather than vice versa. It's probably a safe bet that a very large proportion of our fellow citizens—possibly including many of your own friends, relatives, and classmates—do not understand the multitude of important issues that shape our lives. But failing to understand those issues does not prevent people from adopting opinions on them—opinions that are uninformed, poorly thought out, biased, or simpleminded—and even acting on those opinions, sometimes with disastrous results.

One of the advantages of living in a free society is the opportunity to think for oneself. But having the *opportunity* to do it is one thing, and having the *ability* to do it is quite another. Thinking—especially clear, reasoned thinking—is not easy work, and it doesn't always come naturally. But we