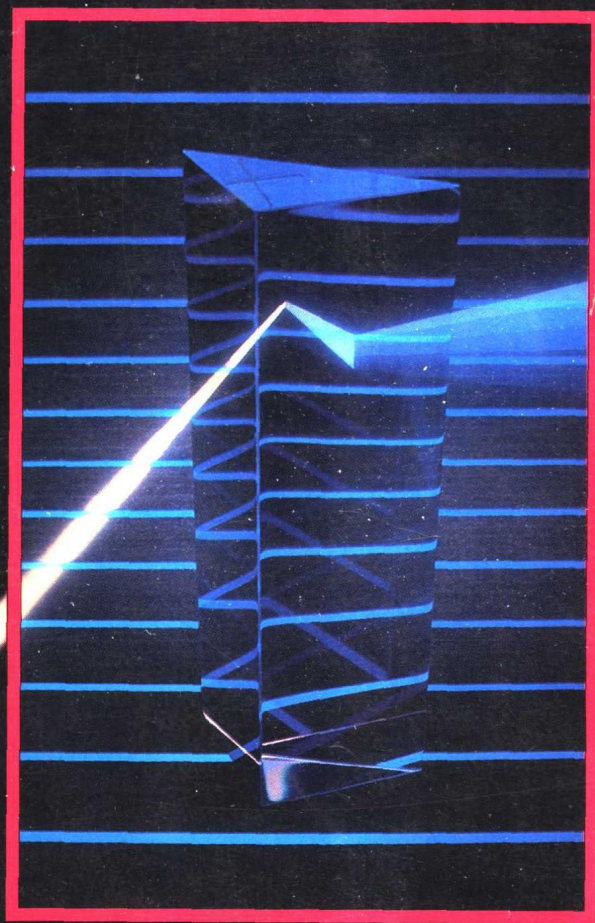


CRITICAL THINKING

EVALUATING CLAIMS AND ARGUMENTS IN EVERYDAY LIFE



BROOKE NOEL MOORE • RICHARD PARKER

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(Credits continue on page 404)

PREFACE

It is ironic that, despite its ancient roots in the disciplines of logic and rhetoric, critical thinking is only now coming into its own as an academic area. The need to help students develop critical thinking skills may have been clear for generations, but only recently have academic institutions begun seeking effective ways to meet the challenge that need presents. We hope this book will help instructors meet that challenge.

Critical thinking includes a wide variety of deliberative processes, all of them aimed at a common goal: making wise decisions about what to believe and do. Critical thinking is more than just the evaluation of arguments that happen to come our way; it includes both the inclination and the ability to search out considerations that are relevant to an issue. The *ultimate* objective in critical thinking is not to grade another's argument, but to determine whether to believe or do what that person would have us believe or do. This is a task that sometimes begins only *after* we have appraised the argument we've been given.

So the real trick to teaching critical thinking, we think, is in integrating logic—both formal and informal—with a variety of skills and topics relevant to the task of making sound decisions about beliefs and actions and making the whole palatable by presenting it in an unfussy way in the context of real-life situations. This is the approach we take in this book.

We've aimed our efforts at students in their first year or two of college, a time when they have many demands on their attention and energy (not all of them conducive to clear thinking) and a lot of important decisions to make. But there is much in the book that should be useful to students of any age. The skills we seek to impart come largely from applying common sense, something none of us is apt to outgrow the need to do.

The book is informal in tone and presents illustrations, examples, and exercises taken from (or designed to resemble) material that is familiar to students. The kinds of examples and exercises you'll find here are just the kind you'll find in daily conversation or on the racks at a typical newsstand.

ORGANIZATION

We've divided the book into two parts, one devoted to claims and one devoted to arguments. Students find the distinction between supported and unsupported claims natural, we think, and the two-part organization allows us, in Part One, to treat many features of claims and to discuss the variety of nonargumentative ways they are urged upon us, without becoming too deeply involved in the principles of argumentation.

Of course, instructors are not obliged to follow our order of presentation. For example, instructors who wish to teach a more traditional course in elementary logic will find the book adaptable to their needs. The two appendices give compact but fairly complete treatments of categorical and truth-functional logic and provide exercises as well. By emphasizing this material, plus that in Chapters 8, 10, and 11, an instructor can use this book to teach a traditional inductive/deductive argument course while still taking advantage of the book's other features.

Instructors who favor a traditional logic course may also wish to include Chapter 7, which treats nonargumentative persuasion. We confess to having long been baffled by the difficulty of applying the principles of logic to letters to editors, family discussions, articles in opinion magazines, and the like. It finally became clear to us that a large proportion of real-life attempts to win acceptance for claims does not involve principles of logic but consists of nonargumentative techniques. Hence, in Chapter 7 we treat a wide variety of nonargumentative persuasion devices. Our experience has shown that this component can help turn even the most traditional elementary logic course into a powerful tool for developing students' critical thinking skills.

We should also draw attention to Chapters 5 and 6, which deal with what we call pseudoreasoning. When a claim is "supported" by considerations that in fact are irrelevant to the issue at hand, that's pseudoreasoning. This concept allows students to distinguish between a weak reason and an irrelevant consideration, a distinction that is subtle but real—and important. (Instructors can treat what we've called patterns of pseudoreasoning as informal fallacies: we've included many of the traditional fallacy names in our scheme.) In these two chapters the emphasis is not on the usual classification of feelings or emotions to which appeals are made but on the relevance of the appeal to the issue at hand. Energy is finite, and we think it better for students to spend their share of the supply on determining the relevance of an appeal rather than on deciding whether the appeal is to prejudice, patriotism, pride, or what have you.

EXERCISES

The exercises in this book do considerable work. We've included a substantial number of them in the text and many more in the instructor's guide, *The Logical Accessory*. Some are designed to review portions of the chapter, some to test procedures developed in the text, and some to provoke class discussion or essays. An instructor's decision about how to use the exercises will help determine the nature of the course. Some of the exercises could serve as assignments that can be quickly graded; others are better used as the basis for classroom discussion. Still others might be used for short quizzes. The answers to starred questions often point out further details and extend some of the material in the text. Instructors may find the answer section useful as a direct teaching aid or as a foil for their own comments.

THE LOGICAL ACCESSORY

The Logical Accessory that accompanies this text is an invaluable supplement to the book. Like many instructor's guides, it contains answers to exercises not answered in the text. It also contains some important comments about the material in the text and some suggestions for teaching this material. Further, *The Logical Accessory* contains quizzes for each chapter, a pre- and post-course examination, and a bank of hundreds of additional exercise/exam questions—all with answers. Finding and inventing exercises is fun for no one; we hope *The Logical Accessory* will help relieve the instructor of as much drudgery as possible.

ADDITIONAL FEATURES

Among the other features of the book that we have found useful in our own classes are the following:

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 apt to encounter media reports of such studies than the studies themselves.

An account of value-laden claims and moral reasoning that acknowledges the crucial importance of reason in moral matters.

A serious treatment of causal arguments that avoids tedious discussion of Mill's methods but recasts what is important in them in accessible language.

An account of analogies used as explanations as well as in arguments.

A clear argument-diagramming technique, easily customized by the individual instructor.

A *short* treatment of definition and meaning.

Not everyone will wish to cover all the topics treated in the book. The particular blend of topics can be tailored to accommodate the situation of each instructor. In short, there are about as many ways to combine topics as there are creative instructors of critical thinking. None of that creativity, by the way, depends on having a substantial background in any one academic discipline.

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We welcome comments, criticisms, and suggestions from instructors who use the book, and we encourage instructors and students alike to fill out the questionnaire at its end. Any useful items that can be made to fit the overall format will be used and acknowledged in later editions.

B.N.M.
R.P.

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C H A P T E R

1

WHAT IS CRITICAL THINKING?

Now if we set about to find out what . . . [a] statement means and to determine whether to accept or reject it, we would be engaged in thinking which, for lack of a better term, we shall call critical thinking.

—*B. Othanel Smith*

Think critically? That's what others don't do,
isn't it?

—*Kirk Monfort*

A newspaper editorial tries to convince you that you and your town would be better off if all the incumbents in the city council were defeated in the next municipal election. A magazine advertisement tries to sell you on a new brand of toothpaste, paper towels, or kitty litter. A friend tries to get you to go skiing next weekend. You are wondering whether you can afford to buy a car.

Unless you are camped out on some remote mountain peak, you are probably bombarded every day by requests, arguments, and exhortations to believe this or that or to do this or that. And making wise decisions about what to believe and what to do is not always an easy task. We would have liked to begin this book by telling you that it presents a neat and easy method for determining how to make such wise decisions, but unfortunately it does no such thing. However, certain methods, techniques, and precautions can make wise decisions easier and more likely. This book, when combined with some effort and careful reflection on your part, is intended to help you consider issues carefully and come to the best decisions you can. In short, it is designed to help you learn how to *think critically*.

CLAIMS AND CRITICAL THINKING

What is critical thinking? We'll offer a definition of sorts, but first let's consider the idea of a claim. A **claim** is a statement that is either true or false. Now, many of the things we say are neither true nor false, as when we ask a question ("What time is it?"), greet a friend ("Hello, Theresa!"), or give an order ("Shut the door."). Such questions, greetings, and orders, as well as lots of other things we say and write, may be appropriate or inappropriate and clever or stupid, but we do not ordinarily think of them as true or false. Thus, none of these remarks counts as a claim in our sense of the word, because a claim must always have a truth value—that is, it must be true or false (although we do not have to *know* whether it is true or false).

Decisions such as the ones called for in the first paragraph of this chapter can be put in the form of claims we may accept or reject. The first example confronts you with the claim "You (or your town) will be better off if the current members of the city council are replaced by other candidates." The second example presents the claim "You should buy Brand X toothpaste (or paper towels, or kitty litter, or whatever)." The other two examples, respectively, present claims like these: "You ought to go skiing with your friend next weekend," and "You can afford to buy a car."

When we are confronted with a claim, we can accept it (that is, believe it), reject it (believe that it is false), or suspend judgment about it, possibly because we don't have enough information at the time to accept or reject it. **Critical thinking** is the careful and deliberate determination of whether to accept, reject, or suspend judgment about a claim. The ability to think critically is vitally important. In fact, our lives depend on it, since the way we conduct our lives depends on what claims we believe—on what claims we