Contents

Preface ix
About the Author xi

Introduction i
Studying a Little Logic i
Organization of the Text i
Reasons for Using Good Arguments 3
Goals of the Text 3

Chapter 1 A Code of Intellectual Conduct 5
An Effective Procedural Standard 5
An Important Ethical Standard 6
A Code of Intellectual Conduct for Effective Discussion 6
  1. The Fallibility Principle 7
  2. The Truth-Seeking Principle 7
  3. The Clarity Principle 7
  4. The Burden-of-Proof Principle 7
  5. The Principle of Charity 7
  6. The Structural Principle 7
  7. The Relevance Principle 7
  8. The Acceptability Principle 8
  9. The Sufficiency Principle 8
  10. The Rebuttal Principle 8
Organization of the Fallacies  53
Attacking the Fallacy  55
  The Self-Destructive Argument Method  55
  The Absurd Counterexample Method  57
Rules of the Fallacy Game  60
Assignments  61

Chapter 5  Fallacies That Violate the Structural Criterion  62
Begging-the-Question Fallacies  63
  Arguing in a Circle  63
    Attacking the Fallacy  65
  Question-Begging Language  65
    Attacking the Fallacy  66
  Complex Question  67
    Attacking the Fallacy  69
  Question-Begging Definition  69
    Attacking the Fallacy  71
Assignments  71
Fallacies of Inconsistency  72
  Incompatible Premises  72
    Attacking the Fallacy  74
  Contradiction Between Premise and Conclusion  74
    Attacking the Fallacy  76
Assignments  76
Fallacies of Deductive Inference  76
  Denying the Antecedent  77
    Attacking the Fallacy  78
  Affirming the Consequent  78
    Attacking the Fallacy  80
  False Conversion  80
    Attacking the Fallacy  81
  Undistributed Middle Term  82
    Attacking the Fallacy  85
  Illicit Distribution of an End Term  85
    Attacking the Fallacy  87
Assignments  87

Chapter 6  Fallacies That Violate the Relevance Criterion  92
Fallacies of Irrelevant Premise  93
  Genetic Fallacy  93
    Attacking the Fallacy  94
  Rationalization  95
    Attacking the Fallacy  96
Contents

Drawing the Wrong Conclusion 97
   Attacking the Fallacy 99
Using the Wrong Reasons 99
   Attacking the Fallacy 101
Assignment 101

Fallacies of Irrelevant Appeal 102
   Appeal to Irrelevant Authority 102
      Attacking the Fallacy 104
   Appeal to Common Opinion 104
      Attacking the Fallacy 106
   Appeal to Force or Threat 106
      Attacking the Fallacy 107
   Appeal to Tradition 108
      Attacking the Fallacy 109
   Appeal to Self-Interest 110
      Attacking the Fallacy 111
   Manipulation of Emotions 111
      Attacking the Fallacy 114
Assignment 115

Chapter 7  Fallacies That Violate the Acceptability Criterion 120

Fallacies of Linguistic Confusion 121
   Equivocation 121
      Attacking the Fallacy 122
   Ambiguity 123
      Attacking the Fallacy 125
   Misleading Accent 126
      Attacking the Fallacy 127
   Illicit Contrast 128
      Attacking the Fallacy 129
   Argument by Innuendo 129
      Attacking the Fallacy 131
   Misuse of a Vague Expression 131
      Attacking the Fallacy 133
   Distinction Without a Difference 134
      Attacking the Fallacy 135
Assignment 135

Unwarranted Assumption Fallacies 136
   Fallacy of the Continuum 137
      Attacking the Fallacy 139
   Fallacy of Composition 140
      Attacking the Fallacy 141
   Fallacy of Division 141
      Attacking the Fallacy 142
False Alternatives 143
Attacking the Fallacy 144
Is-Ought Fallacy 145
Attacking the Fallacy 146
Wishful Thinking 146
Attacking the Fallacy 147
Misuse of a Principle 148
Attacking the Fallacy 149
Fallacy of the Mean 150
Attacking the Fallacy 151
Faulty Analogy 151
Attacking the Fallacy 153
Assignments 154

Chapter 8 Fallacies That Violate the Sufficiency Criterion 160
Fallacies of Missing Evidence 161
Insufficient Sample 161
Attacking the Fallacy 163
Unrepresentative Data 163
Attacking the Fallacy 165
Arguing from Ignorance 165
Attacking the Fallacy 167
Contrary-to-Fact Hypothesis 168
Attacking the Fallacy 169
Fallacy of Popular Wisdom 169
Attacking the Fallacy 171
Special Pleading 171
Attacking the Fallacy 173
Omission of Key Evidence 173
Attacking the Fallacy 174
Assignments 175
Causal Fallacies 176
Confusion of a Necessary with a Sufficient Condition 177
Attacking the Fallacy 178
Causal Oversimplification 178
Attacking the Fallacy 180
Post Hoc Fallacy 180
Attacking the Fallacy 181
Confusion of Cause and Effect 182
Attacking the Fallacy 183
Neglect of a Common Cause 183
Attacking the Fallacy 184
Domino Fallacy 185
Attacking the Fallacy 186
Gambler’s Fallacy 186
# Chapter 9
## Fallacies That Violate the Rebuttal Criterion

<table>
<thead>
<tr>
<th>Fallacies of Counterevidence</th>
<th>194</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Denying the Counterevidence</em></td>
<td>194</td>
</tr>
<tr>
<td>Attacking the Fallacy</td>
<td>195</td>
</tr>
<tr>
<td><em>Ignoring the Counterevidence</em></td>
<td>195</td>
</tr>
<tr>
<td>Attacking the Fallacy</td>
<td>197</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assignments</th>
<th>197</th>
</tr>
</thead>
</table>

## Ad Hominem Fallacies

<table>
<thead>
<tr>
<th><em>Abusive Ad Hominem</em></th>
<th>199</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attacking the Fallacy</td>
<td>200</td>
</tr>
<tr>
<td><em>Poisoning the Well</em></td>
<td>200</td>
</tr>
<tr>
<td>Attacking the Fallacy</td>
<td>201</td>
</tr>
<tr>
<td><em>Two-Wrongs Fallacy</em></td>
<td>201</td>
</tr>
<tr>
<td>Attacking the Fallacy</td>
<td>203</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assignments</th>
<th>203</th>
</tr>
</thead>
</table>

## Fallacies of Diversion

<table>
<thead>
<tr>
<th><em>Attacking a Straw Man</em></th>
<th>204</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attacking the Fallacy</td>
<td>206</td>
</tr>
<tr>
<td><em>Trivial Objections</em></td>
<td>206</td>
</tr>
<tr>
<td>Attacking the Fallacy</td>
<td>207</td>
</tr>
<tr>
<td><em>Red Herring</em></td>
<td>208</td>
</tr>
<tr>
<td>Attacking the Fallacy</td>
<td>209</td>
</tr>
<tr>
<td><em>Resort to Humor or Ridicule</em></td>
<td>210</td>
</tr>
<tr>
<td>Attacking the Fallacy</td>
<td>211</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assignments</th>
<th>211</th>
</tr>
</thead>
</table>

# Chapter 10
## Writing the Argumentative Essay

<table>
<thead>
<tr>
<th>Researching the Issue</th>
<th>217</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stating Your Position</td>
<td>217</td>
</tr>
<tr>
<td>Arguing for Your Position</td>
<td>218</td>
</tr>
<tr>
<td>Rebutting Objections to Your Position</td>
<td>219</td>
</tr>
<tr>
<td>Resolving the Issue</td>
<td>220</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Argumentative Essay</th>
<th>220</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>A Married Woman’s Name</em></td>
<td>220</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assignments</th>
<th>223</th>
</tr>
</thead>
</table>

# Glossary of Fallacies

| 224 |

# Answers to Selected Assignments

| 229 |

# Index

| 239 |
STUDYING A LITTLE LOGIC

It seems as if very few people are really interested in the study of logic, because, as philosopher Charles Peirce suggested many years ago, every person “conceives himself to be proficient enough in the art of reasoning already.”¹ It is interesting to note, however, that we “proficient” reasoners rarely recognize in others a similar proficiency. We regard few arguments other than our own as genuinely good ones, and we sincerely believe that what the rest of the world needs is “to study a little logic.”

Those who make the effort “to study a little logic” will no doubt improve their ability to think correctly and to express that thinking more clearly. One of the current terms for such a skill is “critical thinking.” One philosopher has defined critical thinking as “a process, the goal of which is to make reasonable decisions about what to believe and what to do.”² To do such reflective thinking, students of logic need to learn not only the techniques of distinguishing bad arguments from good ones but also how to construct good arguments.

ORGANIZATION OF THE TEXT

This text is designed to help students to do just that. This skill is reinforced in every section, beginning with the first four chapters, which focus on the nature of a good argument, and continuing through each of the five major chapters on specific fallacies and the final chapter on writing the argumentative essay.

Scattered throughout the text are twelve principles to guide participants in rational discussion. This set of principles includes nearly everything one needs to know in order to engage responsibly in the discussion, construction, and evaluation of arguments and to participate fairly and effectively in a rational discussion of controversial issues.

One of the most difficult things for most discussants to do is to know when to end discussion of an issue and make a decision about what to do or believe. The key is to recognize when an argument is good enough for a reasonable person to embrace its conclusion. This book provides a simple and effective method for doing that by means of the five criteria of a good argument, which form the basis for my own theory of fallacy.

Most treatments of fallacies are not informed by any theory. They simply list particular fallacies as things not to do. The approach of this book, however, is different. According to my own theory of fallacy, a fallacy is a violation of one or more of the five criteria of a good argument. Fallacies are categorized by the criterion of a good argument that they violate. These five categories deal with (1) the structural demands of a well-formed argument, (2) the relevance of the argument’s premises, (3) the acceptability of the argument’s premises, (4) the sufficiency of the premises to support the conclusion of the argument, and (5) the effectiveness of the argument’s rebuttal to the strongest criticisms against the argument or the position it supports.

By its careful focus on the criteria of a good argument, this book helps the reader to recognize when an argument is a good one. The approach is clear and uncomplicated, and the reader should come away from the text with a well-developed, lifelong skill in formulating and assessing arguments.

The sixty fallacies treated in the book are organized in Chapters V through IX by the criterion violated, with one chapter devoted to each criterion. An extended discussion of each fallacy explains and illustrates exactly how the fallacy violates the criterion in question.

In most cases, each specific fallacy is defined with a single sentence. Several examples follow a discussion of each fallacy. Unlike those in many other textbooks, these examples are realistic, practical, and typically as current as the most recent family disagreement, campus discussion, or letter to the editor. Most of the examples are about real issues or common situations, although they have been simplified and separated from other issues in order to illustrate more clearly the features of a particular fallacy.

Following the treatment of each fallacy is a unique “Attacking the Fallacy” section, which offers specific suggestions for dealing constructively with that fallacy when it is encountered in an actual argumentative context. But here, as is the case throughout the book, the emphasis is more on resolving issues than on pointing out flaws in arguments.

At the end of each major section on specific fallacies and at the end of each chapter, the student is given practice assignments in identifying fallacious pieces of reasoning. The reader is asked not only to identify the fallacy by name, but also to explain how the specific piece of reasoning violates one of the criteria of a good argument. Sample answers and explanations are found at the end of the book.

In other assignments, students are asked to bring to class examples of reasoning from current magazines, newspaper editorials, letters to the editor in newspapers
and magazines, speeches, lectures, conversations, and advertisements. Class time can be spent assessing the merit of these student-submitted arguments by applying the five criteria of a good argument and identifying by name, where appropriate, specific patterns of faulty reasoning discussed in the text. Students are also asked to strengthen these submitted arguments or to devise better arguments for alternative views, as well as to construct their own arguments in support of a position on a self-chosen current controversial issue. These student-constructed arguments can then be evaluated by all class members.

REASONS FOR USING GOOD ARGUMENTS

There are a number of practical reasons why it is important to formulate good arguments and to expect others to do the same. First, and most important, good arguments help us to make better personal decisions. Indeed, there is reason to believe that those who use rational criteria in all aspects of their lives have a better chance of success in achieving their goals or completing their projects. Good arguments play a particularly important role in helping us to make difficult moral decisions. Not only do they help us to decide what positive action to take but also to avoid actions with harmful consequences. False beliefs, to which faulty reasoning often leads, blur our moral vision and often result in actions that cause considerable harm to others. Since we are all responsible for the consequences of our actions, it is incumbent on us to base our beliefs and decisions on the conclusions of good arguments.

Second, good arguments promote our general interest in holding only those views that we have reason to believe are true or defensible ones. If we demand good arguments of ourselves, that demand should lead us to new and better ideas, reinforce the strength of many of our present beliefs, or expose weaknesses that should lead to qualification or abandonment of those beliefs.

Third, the use of good arguments raises the level of thinking and discussion in social, business, and personal contexts. Such arguments are usually more effective in trying to convince others of a point of view than are methods such as intimidation or emotional bribery. At least they have a more permanent effect.

Finally, focusing on the quality of an argument is an effective way to resolve personal disputes or to settle conflicts. By attending to the merit of each other’s arguments, we will discover strengths that make a position more defensible or weaknesses that make it less so.

If good or fallacy-free arguments are so important, then why should one spend time studying bad or faulty arguments, or, more specifically, the fallacies in this book? Because the ability to discriminate between fallacious and nonfallacious patterns of reasoning is a necessary condition for good reasoning. A person cannot construct good arguments if he or she does not know the difference between a good one and a bad one.

GOALS OF THE TEXT

The primary purpose of this book, then, is to assist students in becoming better thinkers by giving attention to some of the most common errors in our ordinary ways of thinking. However, since little constructive purpose is served by simply
learning to identify errors, it is my hope that the skills that may be developed in recognizing bad reasoning will help to generate habits of good reasoning. In other words, focusing attention on bad or fallacy-laden arguments should help one to construct good or fallacy-free arguments.

A second purpose of this book is to suggest some concrete ways of challenging the faulty reasoning of others. If one is conscientious in this task, it is usually possible to confront one’s verbal opponents with their faulty reasoning without creating ill feeling. The strategies that are suggested for each fallacy in the “Attacking the Fallacy” sections are designed to get reasoning back on the right track—that is, to turn faulty reasoning into good reasoning. Indeed, these strategies are designed to assist faulty arguers in doing what they allegedly wish to do—to effectively demonstrate the truth of a claim or the rightness of an action.

The strategies may also help to alleviate another problem created by faulty reasoning—the feeling of helplessness often experienced when one is the target of such reasoning. This frustrating experience results from simply not knowing any effective way to address the error in question. Familiarity with some of the most common errors in reasoning can be a defense against being misled or victimized by them. The suggestions in this book should help one gain control of such situations by not only exposing the error, but also redirecting the discussion toward constructive ends.

One of the main goals of education is to help us develop the ability to discover and to defend reliable ideas about ourselves and our world. A careful study of this practical guide to fallacy-free arguments should help accomplish this goal. And because it is likely that the book will expose some of the careless and defective ways that you yourself have defended ideas in the past, you may soon come to believe that not only the rest of the world, but you too, may need “to study a little logic.”
A Code of Intellectual Conduct

This chapter should help you to:

Participate in a rational discussion with others in a way that is more likely to effectively resolve a controversial issue.

Understand the importance of confessing your own fallibility and being open to new understandings as the first steps toward arriving at a more defensible position on a disputed issue.

Avoid linguistic confusion in the presentation of arguments and separate issues in dispute from other issues with which they might be inappropriately mixed.

The primary focus of this book is on the construction of good or fallacy-free arguments, but it is important to understand these arguments in the context of the basic rules of intellectual behavior that a mature person would be expected to follow when engaged in a rational discussion of disputed issues. The principles that constitute this “code of conduct” incorporate both the criteria of a good argument and other elements of effective discussion and argumentation that are addressed more fully throughout the book. As a whole, the code represents two very important standards of behavior: a procedural standard and an ethical standard.

AN EFFECTIVE PROCEDURAL STANDARD

The first standard of behavior represented by the code of conduct is a procedural one. It describes the ground rules that, when followed, most often lead to the successful resolution of issues that divide us. The code, then, is simply a formalizing of effective ways of dealing rationally with controversial issues. The type of intellectual behavior that is most productive in settling disputes, confirming judgments, and revising beliefs
is usually conducted in accordance with such principles. Indeed, researchers in speech communication have discovered empirically that discussions that follow procedural ground rules similar to these are more successful in settling issues than those that do not. My experiences as an arguer and my experimentation with these principles in my own college classes have yielded the same gratifying results.

In my own course in reasoning, I usually start with a discussion of the “Code of Intellectual Conduct,” and I utilize it throughout the course. Near the end of the course, I ask the class members to choose a contemporary moral issue, on which they are more or less evenly and sometimes passionately divided. We then divide into two groups, each group physically facing the other in the classroom, and discuss the issue for three consecutive class periods, following the features of the code outlined in this chapter. I serve as moderator and refrain from saying anything related to the substance of the issue; I simply point out to each side when and if they violate the code. The students are encouraged to do research on the issue between the discussion days, and they often bring their research insights, evidence, or both to the attention of the other class members as a part of the discussion. I have been conducting this experiment for more than twenty years, and almost invariably the class members arrive (after three hours of discussion) at a complete consensus on the moral issue in question. Over the years, they have discussed a wide range of moral issues, from gays in the military to vegetarianism, and they are almost always surprised and delighted with the outcome. The evolved consensus position is rarely one of the two original positions; it is usually a “third” and better position.

AN IMPORTANT ETHICAL STANDARD

The second standard of behavior represented by the code of conduct is an ethical one. While it may seem a bit odd to suggest that failure to carry on a discussion in accordance with the principles outlined here is immoral, it is surely not strange to suggest that one ought to argue fairly. Insofar as a spirit of fair-mindedness demands of all participants in rational discussion a commitment to the same minimal standards of intellectual behavior, these rules clearly take on an ethical dimension. Consider how often we find ourselves in situations in which our verbal opponent refuses to abide by what we regard as the “rules of the game.” This not only shuts down the discussion, but more important, it prevents the issue at stake from being decided or at least further explored. In such situations we frequently become indignant toward our opponent, and our demand for compliance with certain ground rules is accompanied with more than a mild irritation; it has decidedly moral overtones. We clearly expect fair play on the part of others, and we obviously should expect no less of ourselves.

A CODE OF INTELLECTUAL CONDUCT FOR EFFECTIVE DISCUSSION

A “discussion” may involve two or more participants or it may simply be an internal discussion with oneself. In either case, one who wishes to construct the strongest possible arguments for his or her views, and to do one’s part in resolving conflicts concerning issues that matter, should make each of the following principles a part of his or her intellectual style.
1. The Fallibility Principle

Each participant in a discussion of a disputed issue should be willing to accept the fact that he or she is fallible, which means that one must acknowledge that one's own initial view may not be the most defensible position on the question.

2. The Truth-Seeking Principle

Each participant should be committed to the task of earnestly searching for the truth or at least the most defensible position on the issue at stake. Therefore, one should be willing to examine alternative positions seriously, look for insights in the positions of others, and allow other participants to present arguments for or raise objections to any position held on an issue.

3. The Clarity Principle

The formulations of all positions, defenses, and attacks should be free of any kind of linguistic confusion and clearly separated from other positions and issues.

4. The Burden-of-Proof Principle

The burden of proof for any position usually rests on the participant who sets forth the position. If and when an opponent asks, the proponent should provide an argument for that position.

5. The Principle of Charity

If a participant's argument is reformulated by an opponent, it should be carefully expressed in its strongest possible version that is consistent with what is believed to be the original intention of the arguer. If there is any question about that intention or about any implicit part of the argument, the arguer should be given the benefit of any doubt in the reformulation and/or, when possible, given the opportunity to amend it.

6. The Structural Principle

One who argues for or against a position should use an argument that meets the fundamental structural requirements of a well-formed argument. Such an argument does not use reasons that contradict each other, that contradict the conclusion, or that explicitly or implicitly assume the truth of the conclusion. Neither does it draw any invalid deductive inferences.

7. The Relevance Principle

One who presents an argument for or against a position should set forth only reasons whose truth provides some evidence for the truth of the conclusion.
8. **The Acceptability Principle**

One who presents an argument for or against a position should provide reasons that are likely to be accepted by a mature, rational person and that meet standard criteria of acceptability.

9. **The Sufficiency Principle**

One who presents an argument for or against a position should attempt to provide relevant and acceptable reasons of the right kind, that together are sufficient in number and weight to justify the acceptance of the conclusion.

10. **The Rebuttal Principle**

One who presents an argument for or against a position should include in the argument an effective rebuttal to all anticipated serious criticisms of the argument that may be brought against it or against the position it supports.

11. **The Suspension-of-Judgment Principle**

If no position is defended by a good argument, or if two or more positions seem to be defended with equal strength, one should, in most cases, suspend judgment about the issue. If practical considerations seem to require a more immediate decision, one should weigh the relative benefits or harm connected with the consequences of suspending judgment and decide the issue on those grounds.

12. **The Resolution Principle**

An issue should be considered resolved if the argument for one of the alternative positions is a structurally sound one that uses relevant and acceptable reasons that together provide sufficient grounds to justify the conclusion and that also includes an effective rebuttal to all serious criticisms of the argument and/or the position it supports. Unless one can demonstrate that the argument has not met these conditions more successfully than any argument presented for alternative positions, one is obligated to accept its conclusion and consider the issue to be settled. If the argument is subsequently found by any participant to be flawed in a way that raises new doubts about the merit of the position it supports, one is obligated to reopen the issue for further consideration and resolution.

The first three of these principles are commonly regarded as standard principles of intellectual inquiry. They are almost universally understood as underlying our participation in serious discussion.

**THE FALLIBILITY PRINCIPLE**

Each participant in a discussion of a disputed issue should be willing to accept the fact that he or she is fallible, which means that one must acknowledge that one’s own initial view may not be the most defensible position on the question.
To employ the fallibility principle in a discussion is consciously to accept the fact that you are fallible, that is, that your present view may be wrong or not the most defensible view on the matter in dispute. If you refuse to accept your own fallibility, you are, in effect, saying that you are not willing to change your mind, even if you hear a better argument. This is pretty strong evidence that you do not intend to play fairly, and there is no real point in continuing the discussion. An admission of fallibility, however, is a positive sign that you are genuinely interested in the kind of honest inquiry that may lead to a fair resolution of the issue.

The assumption of mutual fallibility is a crucial first step for serious truth-seekers to take. Unfortunately, this move is rarely made in discussions of religion and politics, which is probably the reason that so little progress is made in these important areas of dispute. It is, however, the standard principle of inquiry among scientists, philosophers, and most other academics, who would probably argue that it is a necessary condition of intellectual progress.

If there is any doubt about the appropriateness of accepting the fallibility principle, choose an issue about which people hold a number of alternative and conflicting opinions. For example, consider your own religious position. Since each of the hundreds of conflicting theological positions is different in some respect from all the others, we know before we begin any examination of those positions that only one of them has the possibility of being true, and even that one may be flawed. So it turns out that not only is it possible that your own religious position is false or indefensible, it is probable that it is.

It is likely, of course, that our own theological position is more defensible than many of the others, especially if we have spent time developing and refining it in accordance with the available evidence and the tools of rational inquiry. Nevertheless, out of all of the conflicting religious positions currently held, many of which are vigorously defended by good minds, it is unlikely that only our position will be the correct one. Although we may believe that our own view is the most defensible one, we must keep in mind that others believe the same thing about their views—and only one of us, at best, can be right.

The most convincing evidence of the fallibility of most human opinions comes from the history of science. We are told by some of science’s historians that virtually every knowledge claim in the history of science has been shown by subsequent inquiry to be either false or at least flawed. And if this is true of the past, it is probably true of present and future claims of science, even in spite of the more sophisticated techniques of inquiry used by modern science. Moreover, if such observations can be made about an area of inquiry with well-developed evidential requirements, it seems reasonable to assume that nonscience claims would suffer an even worse fate. In the face of such findings, we should at least be intellectually humbled enough to be willing to question our own claims to truth.

The important point here is that an admission of fallibility is a clear indication that we are consciously prepared to listen to the arguments of others. Although it is not easy to admit honestly that a firmly held position may not be true, it is a discussion-starter unlike any other. It not only calms the emotional waters surrounding the treatment of issues about which we feel deeply, but it has the potential for opening our ears to different and better arguments.
If you are skeptical about how effectively the fallibility principle works, the next time you find yourself in a heated discussion with others, be the first to confess your own fallibility. At least make it clear that you are willing to change your mind. Your opponents will surely enter the confessional right behind you, if only to escape intellectual embarrassment. If they refuse to do so, you will at least know the futility of any further conversation about the matter at issue.

Several years ago, while serving on a panel on the definition of a “critical thinker,” a friend of mine defined a critical thinker as “a person who by force of argument had changed his or her mind about an important issue at least once during the past year.” He went on to say that it is highly unlikely that any person would just happen to be correct on every position held on important matters. On the contrary, given the great number of issues that divide us and the large number of different positions on each of those issues, it is more likely that a person would turn out to be wrong on more issues than right.

THE TRUTH-SEEKING PRINCIPLE

Each participant should be committed to the task of earnestly searching for the truth or at least the most defensible position on the issue at stake. Therefore, one should be willing to examine alternative positions seriously, look for insights in the positions of others, and allow other participants to present arguments for or raise objections to any position held on an issue.

The truth-seeking principle has gone hand in hand with the fallibility principle since the time of Socrates, who taught that we come to true knowledge only by first recognizing our own ignorance or lack of knowledge. The search for truth then becomes a lifelong endeavor, which principally takes the form of discussion, wherein we systematically entertain the ideas and arguments of fellow seekers after truth, while at the same time thoughtfully considering criticisms of our own views.

Since, as we have seen, it is not likely that the truth is now in our custody, all of our intellectual energies expended in discussion should be directed toward finding it or at least finding the most defensible position possible for the present time. That position, of course, is the position that is supported by the strongest or best available argument.

If we already hold the truth, there would obviously be no use in any further discussion. To those who might claim that a discussion could at least be used to persuade others of what we already know to be the truth, it should be pointed out that the “others” are probably making the same assumptions about the views that they now hold. Hence, it is unlikely that any “truth” will be changing hands. If we really are interested in finding the truth, it is imperative not only that we assume that we may not now have the truth, but that we listen to the arguments for alternative positions and encourage criticism of our own arguments.

There are some issues, of course, about which we have already done the hard work of investigation. For example, we may have thoroughly examined an issue, listened to and found seriously wanting the arguments on the other side, and entertained and found weak and nondamaging the criticisms of our position. In such a situation, we should not give the impression that we have an open mind about the issue. Neither should we carry on a pseudo-discussion. We have two other alternatives. If we really
are tired of the issue and anticipate little or no possible evidence that might change
our mind, we should explain that to our opponent and perhaps skip the discussion.
But if we genuinely believe that we might have missed something that could cause us
to alter our position, then, by all means, we should enter the debate as an honest
seeker. The outcome may be that we convince our opponent of our position, but we
should enter the debate only if we ourselves are willing to be turned around by the
force of a better argument.

In our better moments we probably all want to hold only those opinions that
really are true, but the satisfaction of that interest comes at a price—a willingness
to look at all available options and the arguments in support of them. Otherwise,
we might miss the truth completely. The problem, of course, is that most of us
want the truth to be what we now hold to be the truth. We want to win, even if
we have to cheat to do it. For example, one may sincerely believe that Toyota
trucks are the best trucks on the market, but to make that claim before objectively
examining the performance and repair records of other comparable makes of trucks
is simply dishonest.

Real truth-seekers do not try to win by ignoring or denying the counterevidence
against their positions. A genuine win is finding the position that results from play-
ing the game in accordance with the rules. To pronounce yourself the winner before
the game starts or by refusing to play by the rules fails to advance the search for
truth and is in the end self-defeating.

THE CLARITY PRINCIPLE

The formulations of all positions, defenses, and attacks should be free of any kind
of linguistic confusion and clearly separated from other positions and issues.

Any successful discussion of an issue must be carried on in language that all the
parties involved can understand. Even if what we have to say is perfectly clear to
ourselves, others may not be able to understand us. A position or a criticism of it
that is expressed in confusing, vague, ambiguous, or contradictory language will
not reach those toward whom it is directed, and it will contribute little to resolving
the issue at hand.

Perhaps the most difficult problem in achieving clarity is being able to focus
clearly on the main issue at stake. In informal discussion, this is not always easy
to do. Controversial issues usually have many related features, and all of them
may be important to deal with. To be successful, however, we must usually deal
with one feature at a time. Each party to the dispute must therefore exercise great
care in trying to keep other interesting issues, related issues, or both from clouding
the discussion.

Finally, there is a special hell prepared for those who attempt to end a discus-
sion by smugly suggesting that “our disagreement is just a matter of semantics.”
Such people are more villainous than benign because they thereby contribute to
the failure to resolve what is probably an important matter. Linguistic confusion is
not the place to stop a discussion; it is usually the starting place from which we
need to move forward. We must not let the potential resolution of an issue that
matters to us falter on the rock of verbal confusion.
ASSIGNMENTS

**A.** Discuss some of the obstacles to adopting the “Code of Conduct for Effective Discussion” as a means of resolving conflicts in our practical lives. For example, why do you think good arguments so rarely seem to change minds?

**B.** Do you agree that failure to follow the Code of Intellectual Conduct in discussion may be immoral? Why or why not?

**C.** Why is it inappropriate to continue in a serious discussion if you are not open to the possibility of changing your mind?

**D.** Are you a critical thinker? If so, describe an occasion wherein you changed your position by force of argument on an important issue in the past twelve months.

**E.** The next time you are in a heated and unresolved discussion on an important issue, stop and confess that your position may be wrong. If the other participants do not follow suit, ask them whether they are also open to the possibility of being wrong.

**F.** It has been claimed that an argument for a position is not a good one until the arguer has effectively rebutted anticipated serious criticisms that might be brought against it. Since following this advice would call attention to flaws in your own argument, do you think this would tend to weaken it or the position it supports? Why or why not?
What Is an Argument?

This chapter should help you to:

Distinguish an argument from an opinion (or nonargument) when encountering written or spoken material and to determine who has the burden of proof in an argumentative context.

Fairly reconstruct an argument into “standard form” for the purpose of properly evaluating it.

Recognize a deductive argument as distinguished from an inductive one in order to determine the relative strength of its conclusion.

Understand the crucial difference between a value and nonvalue argument and the importance of making explicit the moral premise.

An Argument Is a Claim Supported by Other Claims

The kind of faulty reasoning addressed in this book is that which is found in arguments. The term “argument” here does not refer to a bitter dispute or heated exchange. An argument is a group of statements, one or more of which, the premises, support or provide evidence for another, the conclusion. The premises of an argument are those statements that together constitute the reasons for believing the conclusion to be true. Some premises are conclusions of previous arguments, while others may be statements of fact, personal observations, expert testimony, or expressions of common knowledge. Premises may also be found in the form of definitions, principles, or rules, which, together with other premises, are used in an attempt to support the truth of the conclusion.

An argument is aimed at the goal of demonstrating the truth or falsity of a particular claim by presenting evidence that may persuade others to accept that claim. If a claim or position is being asserted in a piece of written or spoken material and
no other explicit or implicit statement is used to support it, then the material in question is not an argument. It may express an opinion or take a position on an issue, but it is not an argument unless that opinion or position is defended with at least one other piece of evidence or statement of support.

An argument is constituted by two or more explicit and/or implicit claims, one or more of which supports or provides evidence for the truth or merit of another claim, the conclusion.

One of the most difficult tasks in evaluating arguments is that of identifying which of several statements in a piece of argumentative writing or discourse is the conclusion. The conclusion of an argument should not be confused with the main point in the material being examined. Most editorials and letters to the editor, for example, have a point to make, but many of them are not arguments. If no reasons are given for the position taken, there is nothing to conclude. The letter or editorial, in such a case, is simply a series of unsupported claims or points. The conclusion of an argument should be the statement or claim that has at least one other statement in support of it. If you are uncertain about whether there is a conclusion lurking about, look for a statement that seems to give some reason to believe that some other statement in the material is true. That other statement is likely to be the conclusion.

Sometimes, but not usually, conclusions follow words like “therefore,” “consequently,” “hence,” “so,” “then,” or “it follows that.” Sometimes, but not usually, premises follow words like “since,” “because,” “if,” or “assuming that.” In real-life arguments, however, the parts of the argument are not so easily identified. One is usually called upon to interpret the structure of the argument without the help of these identifiers.

In some arguments, there may be several statements, each of which is supported by others. These other supported statements may be the argument’s premises, which may themselves be seen as conclusions supported by so-called subpremises. To determine which supported statement is not a premise but the conclusion of the main argument, try to determine which supported statement also seems to be the primary thesis being defended in the passage. It is possible, of course, and is very often the case, that more than one argument is being presented, particularly in speeches and informal discussions. If you suspect there are multiple arguments in the passage, try to guide the discussion so that it deals with one argument at a time.

Distinguishing Argument from Opinion

Many people have difficulty understanding the difference between an argument and the expression of a personal belief or opinion. They use the words “argument” and “opinion” interchangeably. Sometimes, when I ask others for an argument for their belief or position on an issue, they give me their opinion about that issue rather than an argument. In other words, they simply tell me what they believe. But if we follow the principles suggested in this text, a belief should be the conclusion of an argument. The very word “conclusion” suggests that it is an opinion or judgment resulting from some process of rational reflection on the evidence.

While it is true that all of our claims are opinions, the important question is whether our opinions are supported or unsupported. An argument is a supported
opinion. When students criticize an argument by saying of its conclusion something like, “Well, that’s just his or her opinion,” I remind them that an opinion expressed as the conclusion of an argument is not “just an opinion”; it is a supported opinion, and any criticism of that opinion should be aimed at the quality of the argument supporting it.

An opinion is an unsupported claim; an argument is a supported claim.

The expression of personal opinion is one of the most common forms of verbal exchange, and since reasons for our opinions are often not requested, we are unaccustomed to defending them and are even lulled into thinking that reasons are not required. “Everyone is entitled to his or her own opinion,” it is often said. This is true, but the question here is not whether one has the right to express an opinion; it is a question of which opinions deserve our acceptance. If an opinion is not accompanied by reasons to support it, it is not possible to determine whether it merits our acceptance.

Most of us enjoy exchanging our opinions with others, but rarely do our opinions change unless arguments for another position are presented. And there is reason to believe that some of our opinions need to change, because some of them conflict with each other and therefore cannot all be true. Since some of our opinions also conflict with the opinions of others, we know that some of us are now holding false opinions; for if there are two opposing or different opinions about some matter, at least one of them is false. But which is it? That question can be answered only by evaluating the quality of the argument presented on behalf of each view.

THE BURDEN-OF-PROOF PRINCIPLE

The burden of proof for any position usually rests on the participant who sets forth the position. If and when an opponent asks, the proponent should provide an argument for that position.

Just as a person is generally held accountable for his or her own actions, one who makes a positive or negative claim about something has what is called the burden of proof. In many cases, of course, one does not have to supply such proof, for we are not always challenged to defend our claims. But if the claimant is asked “Why?” or “How do you know that is true?” he or she is logically obligated to produce reasons on behalf of the claim. An exception to this rule is a situation in which the claim in question is well established or uncontroversial. In such a case, the burden of proof might rest on the one who wishes to challenge that claim.

Many opinions, of course, are shared by the parties involved and thus require no defense in a particular context. If one had to defend not only the conclusion but also each of the premises, each of the statements in support of the premises, and each of the statements in support of the statements of support, one would be involved in an infinite chain of proofs—an obviously impractical task. But one at least has the responsibility to provide evidence for one’s conclusion and for any questionable premise, if asked to do so.

This is as it should be. Indeed, we follow this procedure in our basic social institutions. If a pharmaceutical firm wishes to market a new drug, it has the burden of proving to the Food and Drug Administration that the drug is safe and effective.
Our legal system places the burden of proof in a criminal case on the person who does the accusing, the prosecutor. We would permit neither the drug manufacturer nor the prosecutor to get by with simply expressing an opinion on the matter at issue. Neither should we allow others to get by without defending their opinions, especially about important or controversial issues.

To ask others to accept your claim without any support, or to shift the burden of proof to them by suggesting that your position is true unless they can prove otherwise, is to commit the fallacy of “arguing from ignorance,” for you are, in this way, making a claim based on no evidence at all. Indeed, you are basing the claim on the absence of evidence, that is, on ignorance. You can see the absurdity of such a move by taking any highly questionable claim and arguing that the claim is true in the absence of any counterevidence. For example, you could argue that it is true that your great-grandfather died of AIDS unless someone can prove otherwise, or that it is true that pornography causes sex crimes, unless someone can prove that it doesn’t. In this way you fail to take responsibility for your own claims and even attempt to get your opponents to do your work for you. Moreover, since negative claims are notoriously difficult to establish, you are attempting to set yourself up for a “win” by default. But in the argument game, there are no wins by default, for the merit of any position is only as good as the argument given in support of it. You should therefore accept willingly and not begrudgingly the burden of proof when asked and support the conclusion and any questionable premise of your argument—and expect others to do likewise with theirs.

We do not want to give the impression, of course, that a good discussion must be carried on in the formal style of the courtroom. When the mutual interest of the parties is in finding the truth or the best solution to a problem, it is not unusual for all participants to assume the task of both defending and evaluating any claim presented. This approach is sometimes a good one, because it is more natural and often saves time, but no one should act as if the burden of proof therefore no longer rests on the shoulders of those who make controversial claims, nor that it can be shifted without blame to others.

It should perhaps be pointed out that “proof,” in the context in which it is being used here, does not mean absolute, knockdown proof. It does not mean, for example, “beyond a reasonable doubt,” as required of the prosecutor in a criminal trial. When an automobile industry spokesman recently argued that “they have not yet proven any connection between carbon emissions and global warming,” I presume that he was using the term “proven” to mean “beyond a reasonable doubt.” Such proof, however, is not likely to be found for most of the empirical claims typically encountered in informal discussion.

To satisfy the burden of proof required by the principle is to try to present what appears to be a good, or fallacy-free, argument on behalf of a claim. In most contexts, this kind of proof would probably resemble the kind of proof offered not in criminal courts but in civil courts. In other words, the argument would not have to prove the claim “beyond a reasonable doubt” but try to meet the burden of proof with what is called the preponderance of the evidence. If the argument is a good one, it should at least do that.

In some contexts, practical considerations allow for a legitimate way of avoiding the burden of proof. For example, if you have no reason to believe that a particular
claim is true, you may say just that—or even that you do not believe it to be true. However, if you say that you have no reason to believe that a claim is true, and then go on to claim that it is therefore false, you have actually made a claim for which you now have the burden of proof—a task for which you might not be presently inclined or prepared. There is, then, an important distinction between asserting that “I have no reason to believe that X is true” and asserting that “X is false.” The first does not entail the second. The first one, the agnostic option, explains why one is not prepared to affirm or deny the claim; the second, the denial option, is a negative claim for which one must assume the burden of proof. For example, you may not be prepared to prove that ghosts do not exist; but if on the basis of the available evidence, you do not believe that they do, you may escape the burden of proof by taking the agnostic option and say that you have no reason to believe that ghosts exist, rather than to deny that they exist and thereby assume the burden of proof.

THE STANDARD FORM OF AN ARGUMENT

Once a person has satisfied the burden of producing reasons in support of a claim, we are then in a position to evaluate the quality of his or her argument. The first step in doing so is to reconstruct the argument into what is called a standard form. Whether this extraction of the argument from its original context is done mentally or in writing, it is an important part of the process of effectively evaluating the argument. A standard format that exhibits the logical structure of an argument is as follows:

Since (premise),
   which is a conclusion supported by (subpremise),
and (premise),
   which is a conclusion supported by (subpremise),
and (premise),
[and (implicit premise)]
and (rebuttal premise),
Therefore, (conclusion).

One will seldom encounter an argument that has all of these features in so clear a form, but any argument can be reconstructed in a manner similar to this one by an orderly separation of the premises (and any of their subpremises) from the conclusion. Contrary to what might be inferred from the standard model presented above, the number of premises may vary from one to as many as is thought to be necessary to establish the truth of the conclusion. Nor is it necessarily the case that any of the premises will be supported by subpremises. One will also discover that a premise, and sometimes even a conclusion, may be unstated but understood from the context. When putting an argument into standard form, make explicit any of these implicit parts. When supplying these unstated but intended parts, it is helpful to enclose them in brackets so that it will be clear that the supplied parts did not explicitly appear in the original argument.
When reconstructing an argument, one will often encounter what is called a subargument, wherein a subpremise is used to support one of the premises of the main argument. The standard-form reconstruction should clearly indicate that such evidence directly supports the premise that supports the conclusion, but it does not provide direct support to the conclusion.

Unfortunately, only a few encountered arguments contain what might be called rebuttal premises. This type of premise is used to answer anticipated objections to the argument or to the position that it supports. In spite of the fact that most arguments do not contain such premises, their presence is a necessary condition of a good argument.

When reconstructing an argument into standard form, it is entirely appropriate to exclude matter found in the original material that you believe is clearly irrelevant and was not intended to be a part of the argument, but which for some reason the arguer wanted to include. However, material that you think is irrelevant to the truth of the conclusion, but which the arguer apparently thinks is relevant, should be included. Other arguments found in the material should be reconstructed separately, ignored, or saved for another day.

When reconstructing an argument, you should try to translate the essential meaning of the argument’s original features (premises, subpremises, and conclusion) into your own words so that you can display it as simply or as economically as possible. Sometimes, one or more paragraphs can be reduced to a single sentence. For most arguments you will encounter, if you use more than four or five premises in your reconstruction, you have probably failed to grasp the essence of the arguer’s supporting reasons or are including material that is irrelevant or providing no support for the conclusion. As you will see below, it is not necessary to preserve the original language of the arguer, only the essence of his or her implicit and explicit claims. A suggestion that may be helpful to keep in mind during an argument reformulation is that every genuine premise detected should be understood as providing support for the conclusion. If it does not do so, it is probably not a premise. It may be a subpremise supporting one of the premises, or more likely, a claim that is irrelevant to the merit of the conclusion.

The standard form of an argument is one that is reconstructed from its original source in clear, concise language that is consistent with the intention of the arguer, with all implicit parts explicitly stated, and with the premises and subpremises orderly separated from the conclusion.

Let us now take a sample argument and reconstruct it into the standard format. Consider the following letter to the editor of a local newspaper:

Dear Editor:
Your article about AIDS in yesterday’s (October 2) newspaper fails to recognize how wrongheaded we are in our attempt to understand AIDS. For those who are willing to listen, the Bible makes it very clear what causes AIDS. God hates homosexual behavior. He does not, of course, hate the homosexual. God loves all human beings. After all, he created them. But homosexual behavior is a sin, and God punishes the sinner. The scientists can do all the research they want, but they are not going to find the cure for AIDS by looking in the laboratory.
A reconstruction of this argument might look like this:

Since God disapproves of homosexual behavior, (premise)
which is a conclusion supported by passages in the Bible, (subpremise)
and God punishes those who commit acts that he disapproves of, (premise)
[which is also supported by passages in the Bible,] (implicit subpremise)
[and AIDS is clearly associated with homosexual activity,] (implicit premise)
and since science has not found any cure for the disease and will not find it,
(rebuttal premise)
Therefore, AIDS is a form of divine punishment for homosexual activity.
(conclusion)

As you can see, this reconstruction has eliminated material that is irrelevant to
the argument, such as “He does not, of course, hate the homosexual” and reference
to the earlier newspaper article. The premise that God disapproves of homosexual
behavior is supported by the subpremise referring to passages in the Bible. The
premise that God punishes sinners is implicitly supported by the same evidence.
Because that evidence is implicit, it is enclosed in brackets. The next premise (in
brackets) expresses an unstated but clear assumption that AIDS is a disease that is
connected to homosexual activity. The rebuttal premise anticipates the response of
the scientific community that it will find the cure for AIDS through its investigation
and makes the claim that science has had no positive results in finding the cure
for AIDS and will not do so in the future. Therefore, the only conclusion to draw
is that AIDS is a divine punishment for homosexual behavior.

The question of whether this argument is a good one is not the issue here. The
important thing is that we have cleaned up the argument by stating it in its most eco-
nomical form, which will save us considerable time in the evaluation process. We are
now able to see its structure clearly and are thus in a position to examine its merits.

The assumption that an argument presented for any position is capable of being
reconstructed into a standard argument form leads us to the next principle in our
Code of Intellectual Conduct. As suggested by its strange name, the principle of
charity directs us to be exceedingly fair in our reconstruction of arguments.

THE PRINCIPLE OF CHARITY

If a participant’s argument is reformulated by an opponent, it should be carefully
expressed in its strongest possible version that is consistent with what is believed
to be the original intention of the arguer. If there is any question about that inten-
tion or about any implicit part of the argument, the arguer should be given the ben-
efit of any doubt in the reformulation and/or, when possible, given the opportunity
to amend it.

Once an argument has been reformulated, the question then becomes a matter
of whether it has been reconstructed fairly. To ensure fairness, one should allow the
arguer to correct or even refine it further, so that the best possible version of the
argument will be under scrutiny.
If you are reconstructing your opponent’s argument, you should make every effort to be as careful as possible to formulate the argument that you think he or she actually intended to make. You need not turn it into a different or better argument than it is, but you should give the arguer the benefit of any doubt that you may have about his or her intention. This means that you should be willing to supply any unstated or implicit parts of the argument, to eliminate any obviously irrelevant clutter, and maybe even to use language that is clearer or more precise than that used in the original argument. You should not, however, try to improve the argument by supplying premises that are neither explicitly nor implicitly present.

Once the strongest version of an opponent’s argument has been put into standard form, with all extraneous material cleared away, its faulty character may be quite apparent. Indeed, the defects may be so obvious that the arguer might even accuse you of distorting the argument. To help avoid such a charge, you might ask the arguer to confirm the correctness of your work before you call attention to any flaw in it. If the argument’s defects are clearly exposed by putting it into standard form, the arguer may be inclined to start amending the argument right away in order to make it better. If you are feeling especially charitable, you might even want to lend a helpful hand to the process.

It should be clear by now that good discussion in general and argumentation in particular impose an ethical requirement on their participants. But there is also a practical reason for being fair with one another’s arguments. If we deliberately create and then attack a weak version of the original argument, we will probably fail to achieve the very goals that discussion is designed to serve. If we are really interested in the truth or the best answer to a problem, then we will want to evaluate the best version of any argument set forth in support of one of the options. Hence, if we don’t deal with the best version now, we will eventually have to do so, once an uncharitable version has been corrected by the arguer or others. We would do well, then, to be fair about it in the first place by letting our opponents amend any portion of our reconstruction of their arguments.

**DEDUCTIVE VERSUS INDUCTIVE STRENGTH OF ARGUMENTS**

A fair appraisal of an argument sometimes depends on an understanding of the difference between an inductive and a deductive argument, because the category to which an argument may belong suggests something important about its relative strength. A correctly formed deductive argument is one whose form is such that the conclusion follows with logical necessity from its premises. In other words, if the premises are true, the conclusion must also be true. Another way of describing the relationship between the premises and the conclusion of a valid (or correctly formed) deductive argument would be to say that it is impossible for such an argument to have true premises and a false conclusion. One could not accept the premises and deny the conclusion without contradicting oneself. For example:

Since all senators in the U.S. Senate are at least thirty-five years old, (premise) and John Morgan is a U.S. senator, (premise)
Therefore, John Morgan is thirty-five years old or older. (conclusion)

The conclusion of this or any deductive argument simply spells out what is already implicit in the premises. If one can get others to accept the crucial premises, which already include the conclusion, then the arguer’s work is done. The argument is indeed so strong that its conclusion cannot be denied.

A very effective strategy that is sometimes used in argumentation is that of constructing an argument in this deductive way so that the conclusion is, in effect, accepted when the crucial premise is accepted. One would then have a foolproof argument for one’s claim. Moral arguments are often presented in this deductive form. Consider the following example:

Since sexist practices are wrong, (moral premise)
and the use of male-dominated language is a sexist practice or tradition, (premise)
Therefore, the use of male-dominated language is wrong. (moral conclusion)

If the arguer can get his or her opponent to accept the first premise, there is little likelihood that the conclusion can be denied. This is not to say that there cannot be any disagreement about the factual claim made in the second premise, or even that there cannot be any dispute about the meaning of sexism. The point is that the crucial and most controversial premise here is most likely to be the first one, and if it is accepted, the deal, in effect, is closed.

An inductive argument is one in which the premises are supposed to provide some evidence for the truth of the conclusion. However, the conclusion of an inductive argument does not follow with logical necessity from its premises, even if all the premises are true, because the conclusion is not already contained in any of the premises. Therefore, in contrast to a deductive argument, the truth or acceptability of relevant premises in an inductive argument does not force or guarantee the truth of its conclusion. For example:

Since Senator Stone is the most popular Democrat in the Senate, (premise)
and he is personally very charming and articulate, (premise)
and he has moved to a politically moderate position on most issues, (premise)
and he always easily wins reelection to his Senate seat, (premise)
and he is in great demand on the speaking circuit, (premise)
and he is often mentioned by prominent journalists and other Democrats as a possible presidential candidate, (premise)
Therefore, the Democrats will choose Senator Stone as their next presidential candidate. (conclusion)

The conclusion of this or any inductive argument is at best only probable, because the conclusion makes a claim that goes beyond the evidence provided in the premises. It is quite possible that an inductive argument might fail to take into account crucial information that would be relevant to the truth of the conclusion. For example, if Senator Stone does not want to run for the presidency, that fact could obviously affect the truth of the argument’s conclusion.
A correctly formed deductive argument is one whose form is such that the conclusion follows with logical necessity from its premises. A correctly formed inductive argument is one whose form is such that the premises provide good evidence for the truth of the conclusion, but the truth of the conclusion does not follow with logical necessity from its premises.

Most of the arguments that we encounter in our everyday world will be inductive arguments. For this reason, most of them will not exhibit the kind of force that a deductive argument would have. Nevertheless, it is sometimes possible to reformulate an inductive argument in such a way that it takes on the form and the power of a deductive one. Consider the following inductive argument:

Since Roz loves to cook, (premise)
and she has always dreamed about opening her own French restaurant, (premise)
and she hates her present job, (premise)
Therefore, Roz should quit her job and open a French restaurant. (premise)

If you knew Roz, you would probably accept all of these premises as true, but the conclusion does not necessarily follow from the premises as stated. It is possible to accept the premises but reject the conclusion. However, we could change this argument into a deductive one and use a premise that is likely to be accepted that implicitly contains the conclusion, and then the acceptance of the conclusion would be guaranteed. For example:

Since Roz loves to cook, (premise)
and she has always dreamed about opening her own French restaurant, (premise)
and she hates her present job, (premise)
[and a person should always follow his or her dreams,] (added premise)
Therefore, Roz should quit her job and open a French restaurant. (conclusion)

If one were to reformulate the original inductive argument into this deductive form, it would be a much more powerful argument, because if the premises of this deductive formulation of the argument are accepted as true, the conclusion must be accepted as well.

Some deductive arguments require the presence of an appropriate value premise or criterion in order to function properly as a well-formed argument. These are called value arguments. Moral, legal, and aesthetic arguments are examples of this type of reasoning. In a well-formed deductive argument that draws a particular moral, legal, or aesthetic judgment, there must be some appropriate value criterion set forth in one of the premises of the argument that provides some warrant, along with other considerations, for drawing a particular value judgment or conclusion. In moral arguments, this criterion would probably be some general moral principle. In the case of a legal judgment about a particular legal dispute, the value premise would probably be something such as a constitution, a specific law, or a legal precedent. A specific aesthetic judgment would require a more general aesthetic
principle or criterion, such as a general criterion of beauty, on the basis of which one might determine that a particular thing or person is beautiful.

MORAL ARGUMENTS

We have already noted that moral questions lend themselves to the deductive form of argument, which means that moral arguments could be appropriately construed as being among the strongest of arguments. Nevertheless, many participants in moral discussion assume that disputes involving moral issues cannot be settled by argument. They often contend that moral judgments are merely personal opinions, and that there is no way to say that one opinion is any better than another. We reject this assumption, for we believe that value claims should be treated like any other kind of claim. Indeed, if this were not so, there would be very little for many of us to discuss, for it is usually these moral issues that engage our most serious intellectual interest and activity.

Moral claims that are not defended with any relevant evidence are indeed rightly categorized as mere opinions. However, a moral opinion ceases to be a mere opinion whenever it is the conclusion of a moral argument.

The parts of a moral argument are very much like those of any other kind of argument. For example, factual and definitional premises, which form a part of most arguments, are important features of moral arguments as well. A properly constructed moral argument, however, has at least one essential feature not found in nonmoral arguments. A moral argument has a moral premise, which is usually expressed with the help of words like “ought,” “should,” “right,” “wrong,” “good,” “bad,” “moral,” or “immoral.” Examples of moral premises would be “One should treat other people with respect” and “It is wrong to discriminate against a person on the basis of sex.”

A properly constructed moral argument will have most or all of the features of an ordinary argument, but it must have a moral premise—a general moral principle from which a particular moral judgment is drawn in its conclusion.

A moral premise provides a general principle, rule, or standard for behavior from which a particular moral conclusion can be drawn. In other words, it provides a warrant to move the argument forward to a particular moral judgment. Without such a moral premise, no moral conclusion can be drawn, for it is not logically appropriate to move in an argument from a factual claim, a so-called “is,” to a moral claim, a so-called “ought.” To do so is to commit the is-ought fallacy. The only legitimate logical moves are from factual claims to factual claims, a feature of most arguments, or from moral claims to moral claims, the unique feature of moral arguments.

A moral argument, then, moves from a moral premise, along with other premises, to a moral judgment or conclusion. This means that when constructing or evaluating moral arguments, one should always keep in mind that a moral judgment about a particular action or policy that is part of an argument’s conclusion must be based on a more general moral principle that is one of the argument’s premises. If the principle is a controversial one or one not likely to be accepted by those to whom the argument is addressed, the arguer will need to supply a good
subargument in support of that premise. The arguer will also probably need to show why the principle or rule would apply in the present case. For example, what if someone wanted to argue that it would be wrong to study from a copy of Professor Winger’s final exam that was procured by hacking into his computer. The arguer would have to use as one of the argument’s premises a general moral claim like “cheating is wrong.” To make the premise relevant, the argument should also include a premise that would show the connection between the rule against cheating and studying from an unauthorized copy of an exam. The argument might be standardized as follows:

Since cheating is wrong, (moral premise)
and studying from an unauthorized copy of a final exam is a form of cheating, (connection premise)
Therefore, studying from an unauthorized copy of a final exam is wrong. (moral judgment)

Notice that this argument has the form and strength of a deductive argument. If one accepts the premises, one cannot rationally deny the conclusion. Hence, it can be reliably maintained that if an argument’s moral premise is clearly expressed and adequately defended, and the argument is presented in a deductive form, moral arguments can be among the strongest of the arguments we encounter.

Unfortunately, in most moral arguments the crucial moral premise is not explicitly stated. If we follow the principle of charity in our reconstruction of moral arguments, we should, of course, acknowledge any implicit moral premise and then attempt to spell it out clearly as part of the reconstructed argument.

Making explicit an implicit moral premise serves at least two important purposes in the construction and evaluation of moral arguments. First, it usually points directly to the crucial issue or principle that divides those involved in a moral dispute. Second, reflection on the articulated moral premise often triggers ideas about possible legitimate exceptions to that moral principle, conflicts between it and other relevant moral principles, or both of these. Such considerations will often lead to a possible reconsideration of its use in the argument in question. Let us try to illustrate this point with the following moral argument:

We ought to restrict the use of handguns in the country and allow only those people who have a documented need to carry one to do so. There is just too much killing going on in this country. Children get hold of guns, no matter how careful we adults are, and accidents happen.

Our first task is to reconstruct this argument into standard form, which might look something like this:

Since the easy availability of handguns contributes to many accidental deaths, (premise)
and the availability of handguns contributes to many other unnecessary deaths as well, (premise)
and it is impossible for adults totally to prevent unauthorized access to guns, especially from minors, (premise)
[and we ought to do whatever would reduce the number of accidental and un-
necessary deaths], (implicit moral premise)
[and restricting the use of handguns to those who have a documented need to
carry them would reduce the number of those deaths], (implicit connection)
Therefore, we ought to restrict the use of handguns to those who have a
documented need to carry them. (conclusion/moral judgment)

As you can see, the crucial premise in this reconstructed argument is the moral
premise. However, that premise was not explicit in the original argument. We
have spelled it out so that it may be carefully examined. Since most opponents
would probably not disagree with the factual premises in this argument, the only
seriously disputed question has to do with the acceptability of the implicit moral
premise. And since the argument has a deductive form, an acceptance of that prem-
ise will entail an acceptance of the moral judgment. But is the moral premise
acceptable?

Making the premise explicit has clearly exposed where real disagreement might
lie. Opponents may have very different views about the acceptability of this moral
premise, and these differences must be resolved if the issue is to be settled.
Moreover, the articulation of the moral premise may cause even the arguer to re-
consider whether he or she really wants to use it in the argument. For example,
would the arguer wish to apply the same general principle that “we ought to do
whatever would reduce the number of accidental and unnecessary deaths” to the
use of automobiles, which might entail the judgment that automobiles, since they
kill accidentally and unnecessarily, should be restricted to those who have a docu-
mented need to use one? Would the arguer want to apply the same principle to the
use of swimming pools or to horseback riding, both of which cause accidental and
unnecessary deaths, but are available to all? Are these legitimate exceptions to the
general principle? If so, why could not general access to guns be a legitimate excep-
tion? These questions suggest that the arguer’s implicit moral premise may have
been misinterpreted when made a part of the reconstruction or that the argument
needs a different and more acceptable moral premise. In any case, it should be clear
that the articulation of a proper moral premise is crucially important to the work of
evaluating moral arguments.

LEGAL ARGUMENTS

The role of the moral premise in moral arguments is similar to the role of a legal
standard in legal reasoning. Just as there is no logical way to settle a moral dispute
without reference to a governing moral premise, there is no way to settle a legal
dispute without reference to a governing law, legal precedent, or procedural stan-
dard. Similar to the case of dealing with moral premises, settling a legal dispute by
reference to a legal standard is not a simple matter. One still has to do the difficult
work of determining which is the relevant controlling law, what procedural rule
might trump another rule, or which of many legal precedents is most “on point”
in a particular legal dispute.

In spite of having to deal with these sometimes very torturous issues, specialists
in law do not throw their briefcases into the air and declare that there is no way to
decide difficult legal issues. Good lawyers and legal theorists take the task very seriously and construct arguments that they think are good ones, that is, arguments that will lead judges, juries, and appeal courts to see the merit of their conclusions. As with all arguments, a good legal argument must meet the criteria of a good argument. An argument that fails to do so will not be treated kindly when it is evaluated by veteran jurists. Cheap intellectual tricks and emotional appeals may work at some levels or for a while, just as they do outside the courtroom, but in the long run, the best argument wins the day. The only good or just legal decision is one that is supported by a good argument.

Let us take a legal case involving child custody. How does a lawyer go about constructing an argument that will result in an outcome favorable to his or her client’s wishes? A good lawyer would know that the legal precedent of the “best interest of the child” is currently the controlling one in domestic relations courts. Hence, a wise attorney would first persuade his or her client that the best interest of the child should be the client’s criterion as well. The criterion is not that of who is most at fault in breaking up the marriage or who carried the child in the womb for nine months. The lawyer and the client then proceed to present a custody plan, which if adopted would be in the best interest of the child. The lawyer’s argument might look something like this:

Since child custody should be determined in accordance with what would be in the best interest of the child, (legal premise)

and the custody plan we propose would be in the best interest of my client’s child, (premise)

which is supported by the following evidence, (subpremises)

Therefore, the court should adopt our proposed custody plan. (conclusion/legal judgment)

This is obviously a very simple legal argument, but it illustrates how important the relevant legal standard is in restricting the scope and direction of such arguments.

AESTHETIC ARGUMENTS

A third kind of argument that shares a distinctive feature found in both moral and legal arguments is an aesthetic one. Aesthetic arguments attempt to lead others to a judgment about the beauty or artistic merit of something. These kinds of arguments are as pervasive in our society as moral arguments—maybe more so. Not a day goes by without our being confronted by an aesthetic judgment (with or without an accompanying argument) about a particular natural object, some feature of a human body, or an artistic creation, with which we are asked to agree. The fact that most people unthinkingly profess the discussion-stopping cliche that “beauty is in the eye of the beholder” when they disagree with us doesn’t stop them from trying to convince us that our contrary judgments are wrong. What is this all about?

Perhaps they genuinely want to bring us to the point of sharing their aesthetic judgment, but they simply do not know how to do it, just as one who wants to persuade us of a moral judgment may not understand enough about how the moral
premise works in a moral argument to pull it off. Similarly, many people just might not know enough about how aesthetic criteria work in an aesthetic argument to persuade us to share their aesthetic judgments. So they simply fall back on the “eye of the beholder” device to catch their breath and save a little face.

An aesthetic argument should be just as persuasive as any other argument, if it is a properly constructed one. Literary critics have long been very successful in assessing and convincing others of the aesthetic value of a particular piece of literature. Art historians are not at all hesitant to argue vigorously for the superior merit of one artist’s work over that of another. They do it with good arguments. A good aesthetic argument must not only successfully meet the five criteria of a good argument as outlined in the Code of Intellectual Conduct; it must also articulate some generally agreed-upon aesthetic criterion in the premises from which a particular aesthetic judgment can be drawn. This aesthetic criterion is similar to the role played by the moral premise in a moral argument and the legal standard in a legal argument. Moreover, like these other value arguments, aesthetic arguments are deductive in form; so if the premises are true and the aesthetic criterion is an appropriate one, the conclusion will follow with necessity from the premises.

For example, consider the merit of the songs written by Paul McCartney and John Lennon. One commonly accepted criterion for determining the merit of an artist’s work is its enduring appeal to the listening or viewing public. Another companion criterion has to do with whether a particular artist’s work is consistently evaluated positively by experts in the genre. When the criteria are applied to the work-product of the Beatles songwriters, the argument would look something like this:

Since a primary determinant of good music is whether it has continued to be positively appreciated over a long period of time by large numbers of people, (aesthetic premise)

and a related commonly accepted determinant of the merit of music is whether the music has been consistently praised by experts in the field, (aesthetic premise)

and experts in the field of music have consistently praised the songs of Lennon and McCartney, (premise)

and music patrons in large numbers have consistently found a positive aesthetic experience in listening to the songs of these composers, (premise)

Therefore, the music of Lennon and McCartney is good music. (conclusion/ aesthetic judgment)

Although the music of the Beatles is than less than fifty years old, it seems to have satisfied at least two important criteria for determining its artistic merit.

We have attempted to demonstrate that there is no area of inquiry that cannot benefit from focused attention on the development of good arguments. If properly constructed, so-called value arguments can be just as strong or stronger than non-value arguments. However, one must always keep in mind that value arguments have a crucial feature that make them different from other arguments. Moral arguments must have a moral criterion, legal arguments must have a legal criterion, and aesthetic arguments must have an aesthetic criterion in their premises. If these criteria are absent, no moral, legal, or aesthetic judgments can be drawn.
Because so many of the matters of real concern to us center on controversial value issues, it is important to know how to construct and evaluate value arguments effectively. Indeed, you will soon discover that such arguments will command the greatest portion of your time and energy in the world of arguments. Therefore, you should not shy away from using your whole arsenal of argumentative skills when dealing with them.

ASSIGNMENTS

A. Find an example of an argument and explain why it is an argument and not just an opinion. Reconstruct the argument into standard form. Label each of the parts of the reconstructed argument.

B. Select from a magazine or television an advertisement for a product or service. Try to formulate the implied argument in standard form. Label each of the parts of the reconstructed argument.

C. Find or construct an example of a moral argument and reconstruct it into standard form. Give special attention to making the moral premise explicit. Label each of the parts of the argument.

D. Reconstruct in standard form a deductive argument that you recently encountered. Label each of the parts of the reconstructed argument. Carefully explain why it is a deductive argument.

E. Reconstruct in standard form an inductive argument that you have recently encountered. Label each of the parts of the reconstructed argument. Carefully explain what makes it an inductive argument.

F. Make your inductive argument from E a stronger argument by converting it into a deductive argument.

G. Consider again the handgun argument presented in this chapter. Try to articulate a better implicit premise.

H. Construct in standard form a deductive argument that supports a particular position on a legal dispute. Make sure that the argument properly utilizes a law or a legal precedent.

I. Construct in standard form a deductive argument that supports a particular position on an aesthetic dispute. Make sure that the argument properly utilizes an aesthetic criterion or standard.

J. Determine whether the following pieces of discourse are arguments. In each case, if it is an argument, identify the conclusion and the premise or premises that support it. For those that are arguments, put both the conclusion and premises into your own words and reconstruct them in standard form:

1. My generation grew up with corporal punishment, both in the school and in the home. In case you may not have noticed, today’s children are the worst-behaved children in our nation’s history. Our justice system is overloaded with
children who have had no discipline, and by “discipline,” I mean spanking. Children carrying guns and shooting others was virtually unheard of in my time. As far as I know, no one from my high school graduating class is in jail or ever has been. Most people from my generation are well adjusted, self-supporting, and working contributors to society. How many of the present generation can say that?

2. You open a champagne bottle by twisting the bottle and holding the cork steady, because if you do it the other way, you have to take your hand off the cork several times to continue twisting it. If you take your hand off the cork, ever so briefly, the cork can pop off and may hit someone in the eye.

3. As a retired army man, I spent thirty years helping to keep my country free and providing immigrants a chance to come to my country and experience freedom and the opportunity to improve. Now with all the political correctness going on, I find that I have to answer whether I want to use English or Spanish to withdraw my money or use a credit card. Is it too much to ask that an immigrant learn our language?

4. When a well-known writer recently compared the destruction of human embryos to the experiments the Nazis performed on children, we all should have been outraged. Let there be no doubt about it. Living children have names and are mourned when they die. No one is mourning or burying stem cells. Let’s stop this nonsense and move on with lifesaving embryonic research.