FALLACIES AND ARGUMENT APPRAISAL

*Fallacies and Argument Appraisal* presents an introduction to the nature, identification, and causes of fallacious reasoning, along with key questions for evaluation. Drawing from the latest work on fallacies as well as some of the standard ideas that have remained relevant since Aristotle, Christopher W. Tindale investigates central cases of major fallacies in order to understand what has gone wrong and why. Dispensing with the approach that simply assigns labels and brief descriptions, Tindale provides fuller treatments that recognize the dialectical and rhetorical contexts in which fallacies arise.

This volume analyzes major fallacies through accessible, everyday examples. Critical questions are developed for each fallacy to help the student identify them and provide considered evaluations.

Christopher W. Tindale is Professor of Philosophy at the University of Windsor in Canada. He is coeditor of the journal *Informal Logic: Reasoning and Argumentation in Theory and Practice*, author of *Acts of Arguing: A Rhetorical Model of Argument* and *Rhetorical Argumentation*, and coauthor of *Good Reasoning Matters*, third edition.
CRITICAL REASONING AND ARGUMENTATION

General Editors
Douglas Walton, University of Winnipeg
Hans V. Hansen, University of Windsor

This series is aimed at introductory students in the field of argumentation, informal logic, and critical thinking. Informed by research in linguistics, communication, artificial intelligence, and pragmatics, as well as philosophy, books in this series are up to date in method and presentation, particularly in their emphasis on dialogue and rhetoric, which contrasts with the traditional “go it alone” approach. Each book is designed for use in a one-semester course and includes exercises.
For Jonathan
Contents

Preface

1 INTRODUCTION TO THE STUDY OF FALLACIOUSNESS . . . . 1
   1. Strong and Weak Arguments  1
   2. Some Historical Conceptions of Fallacy  6
   3. Approaching Fallacies  12
   4. Why Arguments Go Wrong and How They
      Fool Us  14
   5. Avoiding Fallacious Reasoning  16
   6. Summary  16
   FURTHER READING  17

2 FALLACIES OF DIVERSION . . . . . . . . . . . . . . . . . . . . . . . . 19
   1. Straw Man  19
   2. Treatments of the Straw Man  25
   3. Red Herring  28
   4. What Has Gone Wrong in These Examples? Where
      Does the Fallacy Lie?  30
   5. Treatment and Evaluation of the Red Herring  32
   6. Irrelevant Conclusion  34
   CHAPTER EXERCISES  36
   FURTHER READING  40
3 FALLACIES OF STRUCTURE .......................... 41
   1. Invalid Structures 41
   2. Fallacies of Distribution 44
   3. Propositional Fallacies 49
   4. Treatments of Propositional Fallacies 50
   5. Formal and Informal Fallacies 52
CHAPTER EXERCISES 54
FURTHER READING 55

4 PROBLEMS WITH LANGUAGE .......................... 57
   1. Introduction 57
   2. Ambiguity and Equivocation 58
   3. Treatments of the Fallacy of Equivocation 62
   4. Vagueness 64
   5. Treatments of Vagueness 67
   6. Complex Question 69
   7. Treatment of Complex Question 71
   8. Begging the Question 72
   9. Treatments of Begging the Question 75
CHAPTER EXERCISES 77
FURTHER READING 80

5 AD HOMINEM ARGUMENTS ............................ 81
   1. Introduction 81
   2. The General Ad Hominem 83
   3. Treatments of Ad Hominem 86
   4. Types of Ad Hominem 92
CHAPTER EXERCISES 97
FURTHER READING 102

6 OTHER ‘AD’ ARGUMENTS .............................. 104
   1. Introduction 104
   2. Argumentum Ad Populum 105
   3. Argumentum Ad Baculum 108
   4. Argumentum Ad Misericordiam 113
   5. Argumentum Ad Ignorantiam 117
## Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Summary</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>CHAPTER EXERCISES</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>FURTHER READING</td>
<td>126</td>
</tr>
<tr>
<td>7.</td>
<td>THE AD VERECUNDIAM AND THE MISUSE OF EXPERTS</td>
<td>127</td>
</tr>
<tr>
<td>1.</td>
<td>Introduction</td>
<td>127</td>
</tr>
<tr>
<td>2.</td>
<td>Authorities and Experts</td>
<td>128</td>
</tr>
<tr>
<td>3.</td>
<td>Testimony</td>
<td>130</td>
</tr>
<tr>
<td>4.</td>
<td>The General Appeal to an Expert</td>
<td>131</td>
</tr>
<tr>
<td>5.</td>
<td>Ways of Fallaciousness: Complexities of the Appeal</td>
<td>134</td>
</tr>
<tr>
<td>6.</td>
<td>Summary</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>CHAPTER EXERCISES</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>FURTHER READING</td>
<td>147</td>
</tr>
<tr>
<td>8.</td>
<td>SAMPLING</td>
<td>149</td>
</tr>
<tr>
<td>1.</td>
<td>Introduction</td>
<td>149</td>
</tr>
<tr>
<td>2.</td>
<td>Generalizations</td>
<td>150</td>
</tr>
<tr>
<td>3.</td>
<td>Treatment of Generalization Fallacies</td>
<td>155</td>
</tr>
<tr>
<td>4.</td>
<td>Polls and Studies</td>
<td>159</td>
</tr>
<tr>
<td>5.</td>
<td>Fallacy of Insufficient Statistics</td>
<td>159</td>
</tr>
<tr>
<td>6.</td>
<td>Fallacy of Biased Statistics</td>
<td>161</td>
</tr>
<tr>
<td>7.</td>
<td>Measurement Errors</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>CHAPTER EXERCISES</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>FURTHER READING</td>
<td>171</td>
</tr>
<tr>
<td>9.</td>
<td>CORRELATION AND CAUSE</td>
<td>173</td>
</tr>
<tr>
<td>1.</td>
<td>Correlations and Causal Reasoning</td>
<td>173</td>
</tr>
<tr>
<td>2.</td>
<td>The Post Hoc Fallacy</td>
<td>174</td>
</tr>
<tr>
<td>3.</td>
<td>Misidentifying the Cause</td>
<td>179</td>
</tr>
<tr>
<td>4.</td>
<td>The Argument from Consequences</td>
<td>183</td>
</tr>
<tr>
<td>5.</td>
<td>The Fallacy of the Slippery Slope</td>
<td>185</td>
</tr>
<tr>
<td>6.</td>
<td>Distinguishing Causal Slopes from Precedents</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>CHAPTER EXERCISES</td>
<td>189</td>
</tr>
<tr>
<td></td>
<td>FURTHER READING</td>
<td>193</td>
</tr>
</tbody>
</table>
## Contents

10 ANALOGICAL REASONING .................................. 194
   1. Principles of Analogy .................................. 194
   2. False Analogy .................................. 196
   3. Fallacious Appeal to Precedent .................. 201
   4. Two Wrongs by Analogy .............................. 205
   CHAPTER EXERCISES .................................. 208
   FURTHER READING .................................. 213

Index .......................................................... 215
Preface

The philosophy of reasoning, to be complete, ought to comprise the theory of bad as well as of good reasoning.

– John Stuart Mill, *A System of Logic*

This latest addition to the Cambridge series in Critical Reasoning and Argumentation is a study of bad reasoning, principally as conveyed through traditional and modern fallacies. While the study of fallacies has a long and detailed history, the bulk of critical literature on the fallacies has appeared in the last three or four decades. So much that is new and interesting can be drawn into a full study of the fallacies. The rationale behind this volume is to introduce students to the study of fallacy by means of the latest research in the field, along with some of the standard ideas that have remained relevant since the time of Aristotle. Thus, each topic and fallacy is couched within a discussion of current thinking, providing the clearest explanation possible of both what goes wrong in some of the more prevalent patterns of fallacious reasoning and why arguers and audiences might be misled by such errors.

One thing the recent literature has made very clear is that fallacies are far more complex, and thus deserving of much fuller
analyses, than the traditional textbook treatments have suggested. Too often, fallacies are assigned a label and a brief description, along with an admonition to students to avoid such mistakes in their own reasoning. Not only is this insufficient as a treatment of any fallacy, but such an approach also fails to raise the question of how fallacious reasoning might come about in the first place and why it might prove so deceptive. Two things have reinforced the recognition of how complex fallacies really are: The first of these is the appreciation, now fully expressed in the literature, that many of the fallacies are failed instances of good argument schemes or forms. Hence, we cannot dismiss all *ad hominem* arguments or Slippery Slopes, for example, because there are circumstances under which such reasoning is appropriate. What is required, then, is a careful review of the differences between good and bad instances of such schemes. The label/description approach does not allow for this. The second feature that reveals the complexity of fallacious reasoning is the recognition that to evaluate fallacies fully we need to consider aspects of the context in which the argumentation arises. In many instances this involves the details of a dialogue between participants in an argumentative exchange. In other cases we must sift through what is available of the background to a dispute, such as the history of exchanges between the participants or the beliefs of the audience. This brings into consideration dialectical and rhetorical features crucial to understanding and evaluating fallacies and shows that the study involves more than a traditional logical assessment of the propositions involved. It is also important to consider these features when asking how the fallacious reasoning can come about and prove so effective.

Appreciating this complexity further helps explain why we should study the fallacies at all. One response might be that we should simply ignore them, since they demonstrate failures of human reason and do not contribute to our important social debates. But it is because of these things that we are advised to be
particularly alert to the presence and nature of fallacies. And if we are to do that, we should give them serious consideration and not relegate them to the status of minor topics touched on in passing. From my own perspective, this recognition has brought about a change of view. Although I was persuaded for a long time that the focus of the study of argumentation should be on good reasoning, the complexity of the fallacies and their interesting rhetorical features have convinced me that a more balanced treatment is important and that, as Mill reminds us, a complete appreciation of argumentation will involve accounts of both good and bad reasoning. The study of fallacies, then, is an important part of a whole approach to argumentation – the more so because it is so revealing of how we actually reason. As with many other activities in which we engage (like reading, writing, or calculation), the norm becomes so commonplace that we fail to notice it and learn from it. It is only when we are confronted with a breakdown of those norms that our attention is caught. In many ways fallacies are breakdowns of the norms of reasoning, and through their study we gain a better understanding of ourselves as reasoners and as members of audiences in social settings.

The approach taken to the fallacies in this book tries to match the seriousness and complexity presented in the foregoing paragraphs. This means in the first instance that I have tried as much as possible to illustrate the fallacies through cases of ordinary reasoning that can arise or have arisen in everyday contexts. We will see less of arguments expressed in just a few lines than of detailed reasoning embedded in larger contexts. The more broad contexts we provide and the more we say about them, the more we may be able to understand what has gone wrong and why. You will certainly find the examples in the exercises at the ends of the later chapters more detailed than some of those earlier in the book. This greater complexity reflects the expected growth of ability and understanding that students should develop as they work through
the book. The examples that illustrate fallacies are also presented by means of cases, since cases have a history and a context, involve people, and have consequences. While we will develop principles for dealing with the fallacies studied, any instance or suspected instance of one should be treated as a unique case, assessed on its own terms, since not all ideas associated with a fallacy may apply to any particular case. In this respect, the treatments again reflect what will be encountered outside an academic setting.

Given the conciseness of the book and its introductory nature, some decisions have had to be made about which fallacies to include and which to exclude. In general, I have tried to include the most regularly occurring patterns of fallacious reasoning. A secondary consideration has been given to those that are important historically because of what they illustrate about the nature of fallacies and why people both commit and are deceived by them. The book is designed to work as a companion to Douglas Walton’s *Fundamentals of Critical Argumentation*, although it should also work with other good introductions to argumentation or in courses dedicated to the separate study of fallacies. The principal tool used to treat the fallacies is a set of Critical Questions for each. These questions are designed to help the reasoner think through the complexities of a given case, identifying what is at stake and what has gone wrong, and then focusing on the right features to provide a full evaluation.

This book would not have seen the light of day without the encouragement and interest of the late Terry Moore at Cambridge. I hope the final product reflects well as part of his legacy. He will be deeply missed.

My thinking about the fallacies and how they might best be treated has been influenced by a large number of people researching and writing in the field. The debts will be evident in the discussions and references of each chapter. I am particularly indebted
to Douglas Walton and Hans V. Hansen for their work as editors of this series and for their own contributions to the understanding of fallacies, the influences of which will be apparent. I have also gained much from recent discussions and written exchanges with Andreas Welzel on the causes of fallacious reasoning and the nature of fallacies as norm violations. During periods of writing over the last few years I have benefited from interactions with a number of students, particularly those at Trent University in my senior seminar on the fallacies. Finally, my former assistant, Daniel Farr, researched many of the examples used in the body of chapters and in exercises. I was indeed fortunate to have had such interested and able help.