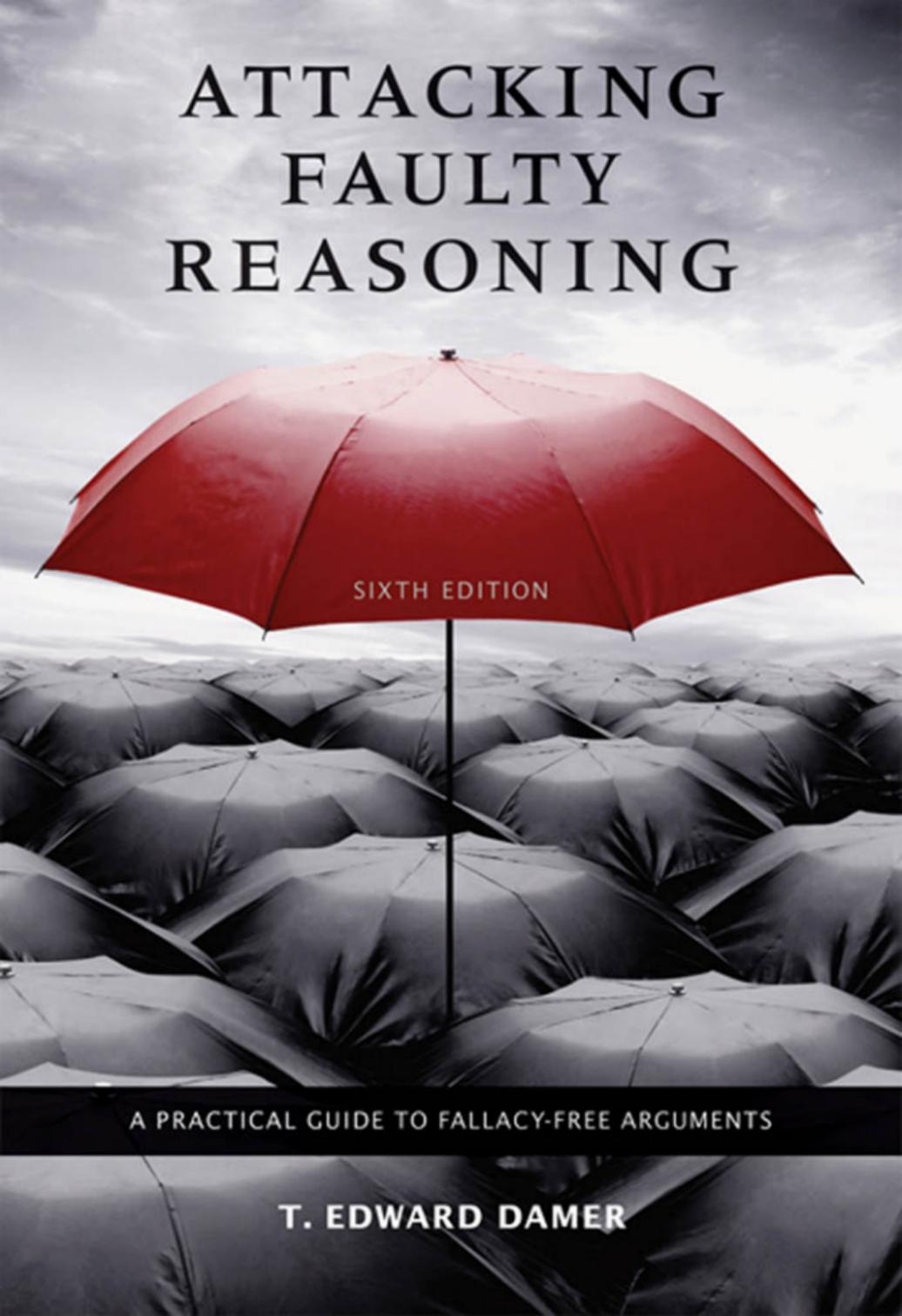


ATTACKING FAULTY REASONING

A red umbrella stands out prominently in the center of the frame, its vibrant color contrasting sharply with the sea of black umbrellas that stretch out to the horizon. The sky above is filled with heavy, grey clouds, creating a somber and atmospheric setting. The perspective is from a low angle, looking across the field of umbrellas towards the horizon.

SIXTH EDITION

A PRACTICAL GUIDE TO FALLACY-FREE ARGUMENTS

T. EDWARD DAMER

ATTACKING FAULTY REASONING

A Practical Guide to Fallacy-Free Arguments

SIXTH EDITION

T. Edward Damer

Emory & Henry College



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PREFACE

Each new edition of *Attacking Faulty Reasoning* gives me an opportunity to write a better book about something I believe is vital to the search for truth. Focus on fallacies provides a constant reminder of how frequently arguments go wrong and lead us *away* from that goal. Developing the skill of recognizing bad reasoning when we hear it will not only help us to avoid being led astray, it will help us to become effective agents of righting that wrong.

I do not enjoy catching people in fallacies; I enjoy hearing a good argument, especially when it leads me to a better understanding or judgment than the one I had before hearing it. My emails from readers of this book suggest that they agree. They do not want to win arguments; they want a world where good reasoning is the norm.

NEW FEATURES IN THE SIXTH EDITION

As in earlier editions, I have tried to be more precise in my definitions of fallacies and in my explanations and illustrations of them. I have rewritten and reorganized the twelve principles in my code of intellectual conduct and the sections on making arguments stronger, my theory of fallacy, the standard form of arguments, the absurd counterexample method, and syllogistic reasoning. I have also updated, refined, and/or replaced a large number of the fallacy examples.

The section on moral arguments has been enlarged and new sections have been added on aesthetic and legal arguments. These new sections provide added focus to the unique feature of value arguments that distinguishes them from ordinary or nonvalue arguments. Another new feature of this edition is the careful labeling of the parts of all the arguments that have been reconstructed in standard form. This innovation is designed to remind the reader of the structural elements of an argument throughout the entire book.

For readers who are familiar with earlier editions, I will call attention to several other changes. The “playing to the gallery” fallacy has been changed to “manipulation of emotions” so that the name of the fallacy will clearly describe its nature, and the fallacies in the chapter on relevance have been reorganized. I have also reduced the length of my sample argumentative essay, reorganized the preface and introduction, and eliminated the appendix. At the suggestion of several reviewers, I have provided learning objectives at the beginning of all chapters and added a considerable number of practice assignments at the end of each of them.

ACKNOWLEDGMENTS

Several people have been especially helpful in the preparation of this sixth edition. I am very appreciative of the staff at Wadsworth for their friendly and highly professional guidance on this project. The philosophy editor, Worth Hawes, was always encouraging, and the assistant editor, Patrick Stockstill, as well as the production service editor, Bharathi Sanjeev, made it happen.

I also thank the following reviewers, who provided helpful comments and suggestions: Cynthia Gobatie, Riverside Community College; Craig Rabinowitz, Allan Hancock College; and Joseph Schloegel, Baptist Bible College.

Finally, I wish to thank my son, Taylor Bradford-Damer Stone, for his technical assistance and helpful suggestions throughout the writing of the new edition. I also wish to express my appreciation to my wife, Nancy Jean Bradford, who has provided loving support and insightful ideas throughout the writing of all six editions. As always, I am grateful for my students, whose criticisms over the past thirty years have contributed in many ways to making each edition a better one.

T. Edward Damer

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INTRODUCTION

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.

¹ Charles Sanders Peirce, “The Fixation of Belief,” in *Collected Papers of Charles Sanders Peirce*, ed. Charles Hartshorne and Paul Weiss (Cambridge, MA: The Belknap Press of Harvard University Press, 1934), Vol. 223.

² Robert H. Ennis, *Critical Thinking* (Upper Saddle River, NJ: Prentice-Hall, Inc., 1996), p. xvii.

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

CHAPTER

I

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 playing 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 discussion 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?

CHAPTER

2

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 economical 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 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.

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 unnecessary 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 premise 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 reconsider 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 documented 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 exception? 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 standard. 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 cliché 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.

WHAT IS A GOOD ARGUMENT?

This chapter should help you to:

Determine whether an argument is a good one by applying the five criteria of a good argument to real arguments.

Apply the conditions under which a rational person should find a premise acceptable or unacceptable.

Become skillful in utilizing a list of proven strategies to make weak arguments into stronger ones.

Apply the conditions under which you should either suspend judgment about a particular disputed issue or consider the issue resolved.

A GOOD ARGUMENT MUST MEET FIVE CRITERIA

There is a very clear difference between an argument and a *good* argument. A person who makes a claim that is supported by at least one other claim has created an argument, but it may not be a very good one. There are five criteria of a good argument. It must have:

- a well-formed structure,
- premises that are relevant to the truth of the conclusion,
- premises that are acceptable to a reasonable person,
- premises that together constitute sufficient grounds for the truth of the conclusion, and
- premises that provide an effective rebuttal to all anticipated criticisms of the argument.

An argument that meets all of these conditions is a good one, and its conclusion should be accepted. If an argument fails to satisfy these conditions, it is probably not a good argument.

Some faulty arguments, of course, are less flawed than others, just as some good arguments are better than others. An assessment of the quality of an argument is almost always a judgment call, for the criteria lend themselves to a wide range of application. There are degrees of relevance, just as there are degrees of acceptability, sufficiency of premises, and effectiveness of rebuttal. However, a number of specific guidelines are available for applying these criteria that may be helpful in assessing the quality of an argument. This chapter covers the important features of each of these criteria.

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.

The first criterion used in determining whether an argument is a good one is the requirement that it be structurally sound. An argument must look and work like an argument. In other words, it should be formed in such a way that the conclusion either follows *necessarily* from its premises, in the case of deductive arguments, or follows *probably* from its premises, in the case of inductive arguments.

A good argument should also provide us with reasons to believe that the conclusion deserves our acceptance. Since most discussions about controversial issues are initiated because the argument's conclusion has not yet been accepted by all participants, the arguer will use premises that are more likely to be accepted than the conclusion. If those premises are accepted and they lead to the conclusion, it is more likely that the conclusion will also be accepted.

For this reason, a good argument should not use a premise that assumes the truth of, makes the same claim as, or makes a claim that is no different from the conclusion. An argument structure that uses such a premise is referred to as "begging the question," as there is no *independent* reason given for accepting the conclusion. Such an argument violates the very nature of an argument, since an argument is a claim supported by at least one *other* claim. An argument that begs the question provides no *other* claim in support of its conclusion; it is therefore structurally flawed and cannot be helpful to us in determining what to do or believe.

Another structural feature of an argument that could render it fatally flawed would be one whose premises are incompatible with one another. An argument that has such premises is one from which *any* conclusion, no matter how outrageous, can be drawn. The fact that an argument with incompatible premises may yield an absurd result demonstrates that it cannot even function as an argument—let alone a good one. It certainly cannot help us decide what to do or believe. The same is true of an argument with a conclusion that contradicts one of the premises. A conclusion that contradicts another claim in the same argument violates the law of noncontradiction (not both A and not-A), which means that no logical conclusion

can be drawn; or to be more accurate, the “conclusion” cannot be a conclusion. For example, if one claimed that capital punishment is morally acceptable (A) because capital punishment is morally wrong (not-A), the “conclusion” was clearly not drawn from the premise, so the argument does not qualify as an argument.

Finally, there are well-established rules of deductive logic that apply to both conditional and syllogistic reasoning. Violating any one of them would create a structural flaw in a deductive argument. For example, one rule states that one cannot exchange or convert the subject and predicate terms in a universal affirmative statement (all X are Y) and assume the same truth value for the converted statement (all Y are X); for although it is true that “all potatoes are vegetables,” it is not true that “all vegetables are potatoes.” Hence, it would violate a rule of deductive logic to move from the original claim to the converted one. Since the violation of this or any other deductive rule creates a situation in which no conclusion should or could be logically drawn, any argument that violates one of these rules is structurally flawed.

One should ask several questions when applying the structural principle to a particular argument. Does the argument conform to the fundamental structure of an argument, in that it provides at least one claim (a premise) whose truth might make it more probable that some other claim (the conclusion) is true? Could any of the key premises of the argument be construed as making the same claim as the conclusion? Do any of the premises contradict another premise? Does the conclusion contradict any of the premises? If the argument is a deductive one, does the structure of the argument violate any known law of deductive logic?

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.

A second principle to use in determining whether an argument is a good one has to do with premise relevance. The premises of a good argument must be relevant to the truth or merit of the conclusion. There is no reason to waste time assessing the truth or acceptability of a premise if it is not even *relevant* to the truth of the conclusion. A premise is relevant if its acceptance provides some reason to believe, counts in favor of, or has some bearing on the truth or merit of the conclusion. A premise is irrelevant if its acceptance has no bearing on, provides no evidence for, or has no connection to the truth or merit of the conclusion.

In most cases the relevance of a premise is determined by its relation to the other premises, although in some cases additional premises may be needed to make the relevance of a particular premise more apparent. Most of us are familiar with the case of the attorney who convinces an initially skeptical judge that a seemingly irrelevant question or piece of testimony is relevant by introducing other evidence or testimony.

An important first step in the reconstruction of another’s argument, then, is to check it for any obvious irrelevancies. In the context of informal discussion, we usually encounter quite a number of sometimes colorful yet irrelevant pieces of material. Most of these features are not intended to be a part of the argument and can therefore be safely ignored. It is, however, sometimes difficult to know whether an

arguer intends a particular claim to be a relevant reason for believing the conclusion to be true or whether the claim serves some other purpose, such as providing important background information for understanding the context of the issue under review. If the latter is true, it is not a part of the argument and should not be included as a part of its reconstruction. If the former is true, it should definitely be included, even if subsequent evaluation may show it to be irrelevant.

In the terms of traditional logic, the premises of an argument are relevant if the conclusion in some sense follows from its premises. If the argument is a *deductive* one, the conclusion necessarily follows from its premises if the argument is patterned after a logically correct or valid form. In such cases, the premises are obviously relevant to the conclusion, because the conclusion of a correctly formed deductive argument simply spells out what is already implicit in the premises.

If the argument is an *inductive* one, the conclusion follows from its premises if those premises support or tend to confirm the truth of the conclusion. However, determining whether the premises of an inductive argument *strongly* or *adequately* support the truth of its conclusion depends also on how well those premises meet the *other* criteria of a good argument.

Arguments fail to conform to the relevance principle in a number of ways. Some arguments use irrelevant appeals, such as an appeal to common opinion or tradition, and others use irrelevant premises, such as drawing the wrong conclusion from the premises or using the wrong premises to support the conclusion.

One may want to ask two questions in an effort to determine whether a particular premise or reason is relevant. First, would the premise's being true in any way make one more likely to believe that the conclusion is true? If the answer is yes, the premise is probably relevant. If the answer is no, the premise is probably not relevant. Second, even if the premise is true, should it be a consideration in the determination of whether or not the conclusion of the argument is true? For example, does the fact that a new movie has enjoyed the greatest box office success in history be a consideration in the determination of the quality of the film? If the answer is no, then a premise that asserts that claim is irrelevant. If the answer is yes, which is unlikely in this case, then the premise should be regarded as relevant.

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.

The third principle to use in determining whether an argument is a good one has to do with premise acceptability. The reasons set forth in support of a conclusion must be acceptable. A reason is acceptable if it is the kind of claim that a rational person would accept in the face of all the relevant evidence available.

The term "acceptable" is preferable to the more traditional term "true" for several reasons. First, the notion of acceptability stems from the very nature of argumentative interchange. In most argumentative situations, the key to achieving agreement on the conclusion is achieving acceptance of the premises. The arguer typically starts with premises that the skeptic is likely to accept or that a rational person ought to accept. Upon acceptance of the premises, assuming that other

criteria of a good argument are satisfied, the opponent is logically led to the acceptance of the conclusion.

Second, since it is notoriously difficult to establish the absolute truth of any statement, it would be an impractical requirement of a good argument that its premises must be true in any absolute sense. Indeed, if such a condition were enforced, there would be very few good arguments. The most that we can legitimately expect is what a reasonable person would *accept* as true.

Third, an analysis of our language suggests that in many ordinary contexts, what we typically mean by the word “true” would be more appropriately expressed by the phrase “accepted as true.” Consider, for example, the contradictory testimony from courtroom witnesses, each of whom is allegedly telling “the truth, the whole truth, and nothing but the truth.” A better way to describe what is happening there is that each witness is presumably telling what he or she honestly *accepts* as true.

Fourth, even if a premise were true in the absolute sense, it may be unacceptable to a particular audience because that audience may not be in a position to determine its truth. For example, the evidence for a premise may be inaccessible to them in that it is too technical for them to understand. The truth of the premise would therefore not add anything to the practical force of the argument. An argument can be a good one only if the premises are *accepted* or *recognized* as true.

For all these reasons, the notion of “acceptability” rather than “truth” seems to be the more appropriate way of understanding this third criterion of a good argument. It is very important, however, that we not give the impression that a premise is acceptable simply because one accepts it or can get others to accept it. We know too well how easy this is, especially if one is preaching to “the saved,” to the immature, or to the easily tricked. Neither does “acceptable” simply refer to what one finds is comfortable or easy to believe. And most certainly it does not mean whatever happens to be accepted. It has to do with what a reasonable person *should* accept. A claim is acceptable only if it would be the kind of claim accepted by a mature, rational person using generally agreed-upon standards of acceptability.

What seems rational to some people, of course, does not always seem rational to others. For that reason, we suggest a number of specific guidelines that should be helpful in determining what is or is not an acceptable claim. Guidelines that help us determine what claims we *should* accept are called the *standards of acceptability*, and guidelines that help us determine what claims we *should not* accept are called the *conditions of unacceptability*. One who takes on the task of assessing the acceptability of premises should carefully follow such standards, just as in court cases lawyers and judges must be guided by rules of evidence.

STANDARDS OF PREMISE ACCEPTABILITY

A premise should be acceptable to a mature, rational person if it expresses any of the following:

1. A claim that is a matter of undisputed common knowledge
2. A claim that is confirmed by one’s personal experience or observation

3. A claim that is adequately defended in the context of the argument or at least is capable of being adequately defended by some other accessible source
4. An uncontroverted eyewitness testimony
5. An uncontroverted claim from a relevant authority
6. The conclusion of another good argument
7. A relatively minor claim that seems to be a reasonable assumption in the context of the argument

A claim that is virtually undisputed by the community of competent inquirers is one that a mature, rational person *should* accept. While there is *no* serious dispute about whether aspirin tends to reduce fever, there *is* serious dispute about whether drinking coffee is bad for your health. Therefore, only the first claim satisfies the first criterion of acceptability. There should be no confusion about the notion of a common-knowledge claim. Such a claim is not identified by determining what most people believe to be true. For example, although 95 percent of Americans believe or accept the claim that God exists, the question of whether God exists *is* in serious dispute by competent scholars. Therefore, whereas the claim that God exists may very well be the *conclusion* of an argument, it cannot serve as a *premise* in an argument because the existence of God is not a matter of undisputed common knowledge.

A mature, rational person should also accept a claim that is confirmed by his or her own experience or observation. And even though one might not have the evidence for a claim in the immediate argumentative situation, it is reasonable to accept a claim that could be easily defended by reference to a readily accessible authoritative source.

Eyewitness reports are more problematic. Experience tells us that there is good reason to be skeptical about many of them. However, if the eyewitness report is not contradicted by another person, by one's own personal observations, or by credible counterevidence, there is no reason not to accept it. The same is true for an undisputed claim made by a relevant authority. Unless there is some reason to challenge an authority's claim, it should be regarded as acceptable.

According to the resolution principle in the Code of Intellectual Conduct, we should also accept the conclusion of a good argument. If that conclusion is used as a premise in another argument, there is no reason not to accept it.

Finally, we may encounter many somewhat minor claims as premises in arguments about which we have no evidence either for or against. If we have no reason to question them, we should probably be willing to accept them if they seem to be reasonable assumptions in the context. Although we cannot say they are true, we may as a practical matter accept them as true in the absence of contrary evidence. To treat them as acceptable moves the discussion along.

CONDITIONS OF PREMISE UNACCEPTABILITY

A mature, rational person should not accept a premise if it expresses any of the following:

1. A claim that contradicts credible evidence, a well-established claim, or a legitimate authority

2. A claim that is inconsistent with one's own experience or observations
3. A questionable claim that is not adequately defended in the context of the argument or not capable of being adequately defended by evidence in some other accessible source
4. A claim that is self-contradictory or linguistically confusing
5. A claim that is based on another unstated but highly questionable assumption

A premise that is inconsistent with credible evidence, a well-established claim, a legitimate authority, or one's own experience or that is not defended in the context of the argument may ultimately be found to be an acceptable one. However, until further inquiry resolves the conflict, the claim in question should not be regarded as acceptable.

Some premises, however, probably could not be defended by available evidence nor by reference to an accessible source. For example, suppose that an arguer claimed that "since 30 percent of all divorces are the result of people getting married too young, states should raise the minimum age at which people can marry in order to stabilize the institution of marriage in society." Such a conclusion would be based on an unacceptable premise, since we can think of no evidence from any available source that could support the claim about the alleged cause of divorce that could possibly be obtained with the kind of mathematical precision claimed in the premise. Because the premise clearly conforms to one of the conditions of unacceptability, it should be treated as unacceptable.

A premise that is self-contradictory or expressed in language that is confusing is also not an acceptable premise. It is self-evident that if we do not even understand a claim, we are in no position to determine whether it is acceptable.

One should also not accept a premise that is based on a so-called unwarranted assumption, in that it *implicitly* uses a highly questionable assumption that seems to give credence to the premise. For example, if an arguer claims that "Dan must be a good singer because he is a member of a very good choir," he or she has used, as an unstated premise, the unwarranted assumption that "what is true of the whole is true of each of its parts." Since that assumption is unacceptable, the claim that rests on it would also be unacceptable.

According to the acceptability principle, then, the premises of an argument should be regarded as *acceptable* if *each* of them conforms to at least one of the standards of acceptability and if *none* of them conforms to one of the conditions of unacceptability. When applying the acceptability principle to an argument, one might ask several questions. Is the premise presented as support for the conclusion one that a mature, rational person would be willing to accept without serious question? Is the premise clear enough to be understood by a mature person? Is the premise based upon any unstated assumption that a mature, rational person would not be willing to accept?

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.

Once one has examined a structurally sound argument for the relevance and acceptability of its premises, there is still plenty of work to do. Relevant and acceptable premises do not necessarily a good argument make. An argument must also meet the demands of the fourth criterion of a good argument—the sufficiency principle. There must be a sufficient number of relevant and acceptable premises of the appropriate kind and weight in order for an argument to be good enough for us to accept its conclusion.

This is perhaps the most difficult principle to apply because we have no clear guidelines to help us determine what constitutes sufficient grounds for the truth or merit of a conclusion. Most argumentative contexts are different and thus create different sufficiency demands. For example, sufficient grounds for voting for one of several candidates for political office are very different from those for buying rather than leasing a car.

The feature of the sufficiency principle that is most difficult to apply is the assignment of weight to each piece of supporting evidence. Indeed, disagreement over this issue probably causes most of the problems in informal discussions. What one participant regards as the most important piece of evidence, another may regard as trivial by comparison with other possible evidence. It is not likely that we will come to closure in a dispute until we come to some kind of agreement about the relative weight to give to the kinds of relevant and acceptable evidence used in support of a conclusion.

Some sciences have well-developed sufficiency criteria in place. Statisticians, for example, have determined what constitutes a proper sample from which to draw defensible conclusions. But in informal discussion, it is usually very difficult to determine when enough evidence or evidence of the appropriate kind has been presented. The only comfort we can offer in this situation is to suggest that the more experience we have in evaluating arguments, the more likely it is that we will have a feel for what constitutes sufficient evidence in a particular context. Small children think that a sufficient reason for granting their every wish is that they want it granted. But we can assume that parents and most college students are experienced enough to know that such an argument does not provide sufficient grounds for giving children everything they desire. Experience teaches us that certain kinds of evidence *do* provide us with sufficient grounds for drawing some conclusions. For example, a person who is experienced in buying real estate has no doubt learned enough about buying land or buildings to know what evidence would be sufficient to convince him or her that a particular real estate purchase would be a good investment.

Arguments may fail to satisfy the sufficiency principle in many specific ways. For example, the premises may provide evidence that is based on too small a sample or on unrepresentative data. The evidence may be simply anecdotal, that is, based entirely on the personal experience of the arguer or a few people of his or her acquaintance. The evidence could also be based on a faulty causal analysis of a situation. Perhaps the most common way of violating this principle is found in arguments in which crucial evidence is simply missing from the argument.

One should ask several questions when applying the sufficiency test to a particular argument. First, are the reasons that are given, even if they are relevant and acceptable, enough to drive one to the arguer's proposed conclusion? Second, is

the evidence presented flawed by some kind of faulty causal analysis? Finally, is some key or crucial evidence simply missing from the argument that must be included as one of the premises in order for one to accept the argument's conclusion?

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.

The final principle for use in determining whether an argument is a good one is the rebuttal principle. Meeting the demands of this principle is perhaps the most difficult of all argumentative tasks. It is the weakest part of my own arguments and of the arguments of my students, children, wife, friends, relatives, and colleagues. Since an argument is usually presented against the background that there is another side to the issue, a good argument must meet that other side head-on. *An argument cannot be a good one if it does not anticipate and effectively rebut or blunt the force of the most serious criticisms against it and the position that it supports.* A complete argument might even rebut the arguments mustered in behalf of alternate positions on the issue in question.

Most reasonably clever people can devise what appears to be a good argument for whatever it is that they believe or want us to believe. For example, virtually every jury in a criminal trial is impressed by the quality of the prosecutor's argument. If that were the only argument heard, nearly all juries would convict the accused. It is the defense attorney's rebuttal and the prosecutor's response to that rebuttal that give the jury the whole picture and the proper basis for decision.

If you look at most controversial issues and the arguments in their behalf, you will often notice that both of the opposing arguments appear to meet the first four criteria of a good argument. They are structurally sound, and they each have premises that are relevant, acceptable, and appear to be sufficient in kind, number, and weight to support the conclusion. This suggests that two arguers supporting opposing or contradictory positions can have equally good or strong arguments. But this cannot be. If the two arguments come to opposite or contradictory conclusions, only one of them can have a true conclusion, and it is incumbent upon us to determine which it is. And the only means that we have available to us is to discover which conclusion is supported by the best argument. If this cannot be determined by scrutinizing the application of the first four criteria in the two arguments, the answer is probably embedded somewhere in the application of the rebuttal principle. Either one or both arguers have ignored or did not know how to respond to the principal challenges to the strength of their own argument *or* one or both arguers ignored or did not recognize the weakness in, or how to formulate the challenge to, their opponent's argument.

It is therefore not at all likely that there can be *good* arguments in support of both sides of opposing or contradictory positions, because at least one of the arguments presented will not be able to fully satisfy the rebuttal principle. Only one of them will be able to *effectively* rebut the criticisms presented by the other. Otherwise, we could find ourselves in a situation in which each of two contradictory positions would merit

our acceptance. But we cannot logically or practically tolerate such an irrational situation. It simply cannot be the case, for example, that a particular abortion is both wrong and not wrong. The solution to this dilemma of “double truth” is therefore to be found by determining which of the arguments can more effectively meet the most serious challenges to its own position, can seriously damage the strongest arguments for the other position, or both.

An argument cannot be a good one if it does not anticipate and effectively rebut or blunt the force of the most serious criticisms against it and the position that it supports.

What should be regarded as a serious challenge? It is one that a reasonable person, following all the guidelines suggested in the Code of Intellectual Conduct, would regard as appearing damaging enough on the surface to require some response. Even if the arguer thinks that there is an effective response to the criticism, he or she should treat it as a serious challenge, if for no other reason than to ultimately convince its holder and others of its weakness. Indeed, a *good* argument would *anticipate* the most serious challenges and use the rebuttal premise to blunt their force. This not only shows that one has done one’s homework, but it disarms the critic in advance. The alleged “big guns” are rendered ineffective before they are fired.

What would be an effective response? It is one that a reasonable person, following all the guidelines suggested in the Code of Intellectual Conduct, would accept as destroying or at least seriously damaging the force of the criticism or counterargument. In other words, an effective response to a serious challenge is one that should cause a mature, rational person to no longer regard the challenge as a serious one.

The rebuttal should be the primary driving force behind the formation of every argument. A good arguer should be constantly mindful of the fact that an argument is not finished until one has “finished off” the criticisms and counterarguments. Regrettably, however, the rebuttal premise is the most frequently neglected feature of arguments. There are perhaps several reasons why this element is missing from most of our arguments. First, we can’t think of any effective answers to the challenges to our position, so we just keep quiet about them. Second, we don’t want to mention the contrary evidence for fear that our position will be weakened by bringing it to the attention of our opponents. Finally, we are so convinced by our own position that we really don’t believe that there *is* another side to the issue. Whatever the reason, an argument that lacks this feature cannot be a good one, for in order for us to be properly convinced of anything, we must first look at all the evidence. And we have not looked at all the evidence until we have looked at the contrary evidence.

Arguments can fail to meet the rebuttal principle in several ways. Several diversionary tactics are commonly used by those wishing to avoid the responsibility of rebuttal. For example, arguments that misrepresent the criticism, bring up trivial objections or a side issue, or resort to humor or ridicule are using devices that clearly fail to make effective responses. The same can be said of those arguments that ignore or deny the counterevidence against the position defended. Finally, some arguers try to avoid responding to a criticism by attacking the critic instead

of the criticism. All of these approaches are clear violations of our obligation to respond honestly to the arguments of our opponents.

One must ask and answer several questions in applying the rebuttal principle to an argument. First, what are the strongest arguments against the position being defended? Second, does the argument address the counterarguments effectively? Third, what potentially serious weaknesses in the argument for the position might be recognized by an opponent? Fourth, does the argument itself recognize and address those possible weaknesses? Finally, does the argument show why arguments for alternative positions on the issue are flawed or unsuccessful?

MAKING ARGUMENTS STRONGER

An argument that violates any of the five criteria of a good argument is flawed. Yet, this fact does not mean that the argument could not be turned into a better one by amending it. It is possible, of course, that many presented arguments may be strong enough to convince some audiences but not others. This is because some audiences may accept an arguer's premises more readily than others. Moreover, some audiences might not be as inclined as others to question some elements of a position being defended. In any case, there are a number of ways to amend arguments to make them stronger. You will notice that almost all of the advice for improving the quality of arguments comes directly from explicit or implicit standards embodied in the five criteria. For this reason, the suggestions below are organized in terms of the relevant criterion. More specific recommendations for strengthening arguments are provided in the chapters on individual fallacies.

STRUCTURAL CRITERION

Convert, if possible, an inductive argument into a stronger deductive one by introducing a general claim from which a necessary conclusion can then be drawn.

Make explicit any implicit parts of the argument that play an important role in the argument.

Recast the premises and conclusion of the argument into their most economical form so that the fundamental parts can be easily recognized.

RELEVANCE CRITERION

Make certain that all of the material presented in the argument is an important part of the argument. If irrelevant but related matters are likely to be considered part of your argument, raise additional issues, or distract your opponent, take them out.

If one of your premises is irrelevant to your argument, but most of your audience might regard it as supportive of your argument, take it out, as other members of your audience will recognize the mistake and expose it, thereby weakening the argument.

ACCEPTABILITY CRITERION

Whenever possible, substitute less controversial premises in place of the more controversial ones in an argument directed toward a particular audience, if the less controversial ones will do the job.

Soften, if possible, any absolute claim in a way that might make it more acceptable. For example, change “all politicians” to “most politicians.”

Clear up any vague or confusing language in the argument in order to make the premises more acceptable to the target audience.

SUFFICIENCY CRITERION

Add any additional premises that might be necessary to provide enough evidence of the right kind, number, and weight for a target audience to accept the conclusion.

If there is reason to believe that an important controversial premise may not be acceptable to a particular audience, support the premise with additional subpremises.

REBUTTAL CRITERION

Be as exhaustive in your rebuttal as the context demands. For some target audiences, a strong argument will need to address perhaps only one serious criticism; for others, a strong argument may need to address many more criticisms.

Declare, as a part of your argument, which are the weakest points in the argument, not only to demonstrate your truth-seeking objectivity but also to blunt the force of your opponent’s counterfire.

Some arguments, of course, cannot be improved, not because they are good enough already, but because they defend views for which good arguments are not likely to be found. Our commitment to the search for truth demands that we not spend time and energy trying to make a hopelessly weak or bad argument a trifle less weak—unless, of course, we are attorneys who are required by our profession to give the best defense possible in the service of our clients.

APPLYING THE CRITERIA TO ARGUMENTS

The attention we have given to the five criteria of a good argument and the general suggestions for improving not-so-good arguments should give us a very clear picture of what a good argument looks like. We should therefore be ready to apply these criteria to some sample arguments.

The first step in evaluating arguments is to become mentally prepared. We must remember that the issue is not whether one is inclined to believe the conclusion. The primary question in evaluating arguments is whether one should believe the conclusion on the grounds provided by the argument. Even if the conclusion might turn out to be true, the argument presented might not authorize our acceptance of it.

Let us put the criteria of a good argument to work in evaluating arguments that might be found in some of the following letters to the editor.

Letter A

Dear Editor,

I think that Governor Reichard is doing a great job, in spite of all her Republican critics. Just last week, Don LaPlant said in a news conference that he thought Governor Reichard was one of the best governors in the South and that she was doing an excellent job dealing with the complex problems of the state. And he should know! He's the state chair of the Democratic Party.

Let us first put this argument into standard form. This means that we must first identify the conclusion and then find the premises that are used to support that conclusion, along with any supporting statements for those premises. The other or extraneous material can be ignored. The reconstructed argument about Governor Reichard would look something like this:

Since Don LaPlant, the chair of the Democratic Party, says that the Democratic governor is doing a good job, (premise)

Therefore, Governor Reichard is doing a good job. (conclusion)

Our next step is to test the reformulated argument against the five criteria of a good argument. There appear to be no structural problems with this argument, so let us begin with the criterion of relevance. Stated in its most economical form, the argument before us provides only one reason for the positive assessment of the governor's performance in office. That premise fails to meet the criterion of relevance. Since the chair of the governor's party is likely to be less than objective in his assessment of her effectiveness, his statement must be seen as irrelevant, for the testimony of a biased authority cannot count in favor of the truth of a claim. Perhaps an excellent argument could be constructed for the conclusion in question, but that is not the issue at this point. The issue is whether the argument being examined is a good one. Our evaluation says that it is not, because its only premise is irrelevant. Since there are no other premises, it also fails the acceptability, sufficiency, and rebuttal criteria.

Letter B

Dear Editor,

The seat-belt law is unfair and a clear abuse of governmental authority. By not wearing a belt we are not endangering anyone but perhaps ourselves. In some cases, wearing seat belts can actually endanger your life. Recently, in an accident in Jackson County, the vehicle hit a tree and was completely crushed except for a small space on the floor underneath the steering wheel. Since the driver broke the seat-belt law, his life was saved when he was thrown to the floor of the car.

Reconstructing this argument will take a little more effort than the first one. Even though the writer claims that the government has no right to require us to use seat belts, no reason is given in support of that claim. Hence, it cannot be the conclusion of this argument, unless we want to be more than charitable. The only claim that is supported within the argument is the one that wearing a seat belt can be dangerous and should not be required. The reconstructed moral argument would probably look like this:

[Since laws should not require things that endanger our lives,] (implicit moral premise)

and wearing seat belts can endanger our lives, (premise)

because one man's life was saved because he was not wearing his seat belt,
(subpremise)

[Therefore, we should not be required by law to wear seat belts.] (implicit
conclusion)

The principle of charity requires us to grant that the first premise and the conclusion are implicit. For that reason, we have enclosed them in brackets to indicate that they were not explicitly stated but are understood as part of our reconstruction of the argument. We believe the argument exhibited in this form actually looks better than the original one, but that does not mean it is a good argument.

How well does it meet the criteria of a good argument? The argument seems to be structurally well formed, and the premises seem clearly relevant to the truth of the conclusion. The first premise also seems to be acceptable, for it is a commonly accepted moral view held by reasonable people that the government should not pass laws that endanger our lives. But the second premise clearly fails to meet the acceptability criterion, because it is a questionable claim that is not adequately supported in the context and also conflicts with credible evidence to the contrary.

The subargument supporting the second premise is also problematic. The anecdotal evidence given in support of the premise that seat belts endanger our lives is hardly sufficient support for such a claim. The argument also fails to meet the rebuttal criterion, for it makes no attempt to effectively answer the arguments on the "buckle-up" side of this issue. The argument fails the acceptability, sufficiency, and rebuttal criteria of a good argument, and it is therefore not a good argument.

Letter C

Dear Editor,

I am a resident of the Monroe District in Washington County. I am very thankful to have someone of Supervisor Alice Morton's intellect, dedication, and experience who not only is willing to serve, but also has the time to devote to all the citizens of this county.

I called Ms. Morton at home the other night and learned that she had been out of town for two days on Washington County business. On other occasions when I wanted to speak with her, I found her working in the county offices.

My understanding is that someone is running against her for the Monroe District board of supervisors seat. I don't want to trade Ms. Morton, who has proven ability and experience, for someone who could not possibly bring to the office of supervisor the expertise and devotion that we citizens now enjoy.

Most of us would probably agree that the unstated conclusion of this argument is that we should all vote for the incumbent in the upcoming election. Since this conclusion is implicit, we have enclosed it in brackets. The rest of the reconstruction would be as follows:

Since Alice Morton is experienced, (premise)

and she is devoted to the citizens of the county, (premise)

and she is willing and has time to serve, (premise)

and she works hard, (premise)

and she is intelligent, (premise)

and no other person in the Monroe District could do a better job in the office of supervisor, (rebuttal premise)

[Therefore, district residents should vote for Alice Morton.] (implicit conclusion)

This argument satisfactorily meets the basic structural demands of a good argument. All of the premises presented in this argument also seem to be relevant to the issue of choosing county representatives, and since Ms. Morton is an incumbent, the first premise is unquestionably an acceptable one. The next four premises are fairly standard descriptions of people running for local office, so there is probably no good reason not to find them acceptable. Even though some of these premises may be questioned with regard to the adequacy of supporting evidence, these are probably not crucial issues in the argument. The last premise, however, is highly questionable. Indeed, it is unlikely that any support at all could be found for it. This would perhaps not matter if the premise were not so crucial. But the question of the merits of rival political candidates is one of the crucial issues in an argument defending one of them. This sixth premise, then, is not adequately defended and is therefore unacceptable.

To the arguer's credit, the sixth premise is also probably an attempt to rebut the argument against the election of Ms. Morton, but it is hardly an effective one. In fact, it is so overstated as to render it ludicrous. The argument therefore fails the rebuttal criterion as well.

Perhaps the most serious problem with the argument, however, is its violation of the sufficiency criterion. As noted earlier, the context of an argument often determines what constitutes sufficient evidence for a claim. In this case, sufficient grounds for taking the action of voting for a particular political candidate would at least include information about the goals and ideas of the person whose candidacy is being supported. In this argument, however, such matters are totally absent. Since the argument fails the sufficiency and acceptability criteria, as well as the rebuttal criterion, it is not a good one.

Letter D

Dear Editor,

The American Heart Association is debating whether to fund a proposed study that would involve drowning forty-two dogs at the State University. The university's College of Medicine received permission to use stray dogs from the local pound to determine whether the Heimlich maneuver could be used to save drowning victims.

Dr. Heimlich himself has denounced the proposed study as a "needless experiment" and as one that "must be classified as cruelty." Others have stated that a dog's windpipe and diaphragm are not comparable to those of humans and therefore cannot be used in determining whether mouth-to-mouth resuscitation or the Heimlich maneuver would be preferable. Concerned readers should urge the American Heart Association to reject the study.

Although the arguer wants readers to contact the American Heart Association with their concerns, no specific reasons are given for that action, so we can infer that it is not the argument's conclusion, even though one might take that action if

convinced of the actual conclusion. The substantive conclusion is that the American Heart Association should not approve the proposed study. The reformulated argument looks like this:

Since the medical staff of the State University's College of Medicine has applied for a grant to the American Heart Association to fund a study involving dogs that they believe would help to determine whether the Heimlich maneuver could be used effectively for drowning victims, (premise)

and the use of dogs in the proposed study would not help to determine whether that would be possible, (premise)

because some people have said that a dog's breathing apparatus is not comparable to that of humans, (subpremise)

and Dr. Heimlich himself has said that such an experiment would be needless and cruel, (premise)

[and experiments that are cruel and not useful in any way should not be performed,] (implicit moral premise)

[Therefore, the American Heart Association should not fund the experiment with the Heimlich maneuver involving dogs.] (implicit conclusion)

The conclusion is clear, although it is not explicitly stated; hence, we have placed it in brackets. The first premise is acceptable and relevant, as it is a straightforward statement of fact that explains the occasion for presenting the rest of the argument. The second premise, together with its subpremise, would probably not be acceptable, for it is difficult to believe that medical staff of the College of Medicine, who submitted the grant proposal, would not know whether there is a crucially relevant physiological difference between dogs and humans that might make the proposed experiment worthless. In any case, the subpremise for the second premise does not pass the relevance criterion, because the testimony is from an unidentified source. Since we don't know whether the "others" are experts in physiology, we don't know whether their testimony about a dog's breathing apparatus should count in favor of the premise or even be taken seriously.

The third premise, which claims that Dr. Heimlich has a negative assessment of the experiment, is probably not acceptable because we cannot verify that he actually made the statement. Moreover, his assessment would carry very little weight, since we are not told why he thinks the experiment is "needless." The impression is given that Dr. Heimlich agrees with what "some people" have said about the problem of the noncomparable breathing apparatus, but that is not at all clear. The implicit fourth premise is acceptable, because it appears to be a self-evident principle. It is at least one that most mature, rational people would accept.

This is a structurally well-formed argument, but it has only one relevant and acceptable premise, so it hardly meets the sufficiency criterion for embracing the conclusion. The argument could possibly have been saved from being severely flawed if it had effectively rebutted the assumption of the College of Medicine that the experiment was a worthwhile one. Because there is no such rebuttal premise, and because it fails to satisfactorily meet the relevance, acceptability, and sufficiency criteria, the argument is not a good one.

Letter E

Dear Editor,

I am concerned about the efforts of some to amend the Constitution to prohibit the burning of the American flag as a response to the Supreme Court's ruling that burning the flag can be seen as an expression of free speech and that free speech is protected by the First Amendment.

I love my country and the flag that represents it in official ways, and I don't like to see anybody use the flag in a disrespectful way. For example, I am upset when I see some people use the flag as a shirt or bathing suit. But I also love the freedom that we have in this country, and that includes the freedom to criticize the country in whatever peaceful way we choose. I would not choose to do it by burning the flag and I wish that others would not do so either, but criticizing the country or its policies is a right guaranteed by our Constitution. If we start changing the Constitution to limit the freedom to express opinions in this way, it is not unlikely that some will soon want to limit it in other ways as well, such as prohibiting people from expressing a negative opinion about the country in a federal office building or spitting on a copy of the Declaration of Independence. Would we then have to pass additional amendments to prohibit those actions? Such an outcome would not be good for a healthy democracy.

Some people say very hateful, false, and hurtful things about our president and other leaders, but they have the right to do that. Even though I might not like some of the things that critics say in expressing their disagreement with our leaders or their policies, I am not aware of any way in which the country is seriously damaged by these expressions. In some ways it is actually strengthened, because positive changes in policy and leadership come about as a result of criticizing the status quo, however that is done. Just as we try to teach people to show respect for others, we can teach them to respect the flag. But sometimes they show respect for neither. However, we do not want to put people in jail just because they do not always show the respect that we think they should.

The conclusion of this argument is never explicitly stated, but it is exceedingly clear that the writer is opposed to amending the Constitution to prohibit flag burning. Here is how a reformulation of this argument might look:

Since the Constitution guarantees freedom of speech, (premise)

and the Supreme Court has ruled that burning the flag can be interpreted as an expression of free speech, (premise)

and having the unrestricted freedom to express our opinions is more important than restricting the peaceful method or the content of that expression, (premise)

and a constitutional restriction on free speech by restrictions on flag burning could lead to additional constitutional amendments to restrict free speech, (premise)

because there are many distasteful ways to criticize or show disrespect for the country, (subpremise)

and instituting additional such constitutional restrictions would not be good for a healthy democracy, (premise)

[because it would place further restrictions on free speech,] (implicit subpremise)

and criticizing the country by burning the flag or even by other distasteful methods does not do any serious damage to the country but actually strengthens it, (rebuttal premise)

because it is through criticism of our country that we make positive changes, (subpremise)

and we would not want to punish people for showing disrespect for the flag, (rebuttal premise)

[because people are more important than inanimate objects] (implicit subpremise)

and it is unlikely that we would punish them for showing disrespect for other people, (subpremise)

[Therefore, we should not amend the Constitution to prohibit burning of the flag.] (implicit conclusion)

This is a structurally well-formed argument, and all of the premises in this argument seem to be relevant to whether or not it would be a good idea to amend the Constitution with regard to the issue of flag burning. And since the first two premises are matters of undisputed fact, there should be no question about their acceptability. There is also little question about the importance of the principle of free speech in a democracy, so rational people would probably find the third premise to be acceptable as well.

Most of us, including the defenders of the “flag-burning” amendment, would also probably accept the view expressed in the fourth and fifth premises (and their subpremises), that there are other equally distasteful expressions of free speech that some would want to restrict but that would not produce a desirable outcome for a healthy democracy that supports free speech.

The last two premises are attempts to rebut the main arguments of the defenders of the amendment. The sixth premise addresses the view that burning the flag does damage to the country in some way, but since there is no obvious damage that has been identified, a simple denial of the claim may be sufficient in this argument. The burden of proof that there *is* damage is on those who claim that such damage occurs. However, this premise and its subpremise defend the view that political criticism, however it is expressed, often serves a public good, and it would be difficult to find fault with that claim. The seventh premise (and second rebuttal premise) and its subpremises try an analogy that may be the weakest part of the argument, but it may still play a positive role. They challenge the defenders of the amendment by pointing out that because we are not likely to punish those who show disrespect for other human beings, it seems odd to want to punish people for showing disrespect for an inanimate object.

This well-formed argument uses relevant and acceptable premises that are sufficient in kind, weight, and number to support the conclusion. It also does an effective job of rebutting the anticipated criticisms of the defenders of the other side of the issue. Since the argument satisfactorily meets all five criteria for a good argument, we would assess it as a good one and embrace its conclusion.

Discovering a good argument that passes muster for a position on an issue in dispute puts us on the path toward resolving our disagreement. But one of the

hardest tasks in rational discussion is knowing when and how to end a discussion and to consider an issue settled. Many of us are hesitant to throw in the towel and go with the best argument, especially if our own argument is not declared the best. We want to suspend judgment and discuss the issue another day. However, according to the Code of Intellectual Conduct, suspension of judgment is appropriate only under certain conditions.

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.

If suitable evidence is so lacking that one has no good basis for making a decision either way, it may be quite appropriate to suspend judgment on the matter and wait until there is more of a basis for decision. This alternative should not, however, be seen as a clever way to avoid the psychological fright of making a difficult decision or of moving into unfamiliar territory.

The same might be said of the second condition for suspending judgment—the equal strength of the arguments. This situation is actually a very rare phenomenon, for one argument is almost always better than the others if judged by the five criteria available.

Some issues, of course, do not permit suspension of judgment. If the decision is a forced or momentous one, such as deciding whether to have an abortion, one has to decide on the grounds of the practical consequences of *not* making the decision.

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.

If the purpose of rational discussion is ultimately to decide what to do or believe, then coming to closure should happen more often than it does. There are many good arguments out there, and if good arguments resolve issues, why are not more issues resolved? For example, since the “flag-burning” amendment argument just discussed was found to be a good one, should that not settle the issue? Other issues, such as gay rights, global warming, the creationism/evolution debate, and questions of gender bias should also be settled. The arguments have been made,

and they are good ones, but the debates go on. How much more discussion is needed, just because some refuse to recognize the force of a good argument?

Unfortunately, very few controversial issues ever come to rational resolution. If you have doubts about this, then ask yourself when the last time was that you allowed the force of argument to change your mind about an important issue—even though changing one's mind in the face of a good argument should not be a difficult thing to do for a genuine truth-seeker.

So why does it not happen? Why are issues not resolved? There are probably a number of reasons. It could be that one of the parties to the dispute has a blind spot; that is, he or she simply cannot be objective about the particular issue at hand. Or maybe he or she has been rationally but not psychologically convinced by the discussion. Another possible explanation is that one or more of the parties in the dispute have been rationally careless or at least guilty of not thinking as clearly as they should. It is even possible that one of the parties has a hidden agenda—an issue to defend other than the stated one. Or maybe the parties involved are simply not being honest with themselves, for they may want to win the argument more than they want to find a solution to the problem. Finally, perhaps the parties are in what might be called *deep disagreement*. In other words, they are divided on the issue because of fundamental underlying assumptions that have yet to be explored. Unfortunately, most of these explanations fail to provide an adequate justification for not resolving our disputes, for it can be demonstrated that each explanation rests on an identifiable violation of at least one of the principles in the Code of Intellectual Conduct.

It is possible, of course, that some matters are left unresolved for more respectable reasons. Perhaps the evidence available is regarded as presently too skimpy to lead to a conclusion, or perhaps one of the parties is still looking for an effective counterargument that he or she genuinely thinks is out there. These may be reasons that make us less confident in bringing a dispute to closure and adopting the conclusion of one of the arguments. But where does this leave us? Is full confidence a real possibility? In most cases, probably not. Few arguments fully satisfy all five criteria of a good argument. However, in the case of the most important issues we encounter, we have little option but to decide at some point what to do or believe. For logical and practical reasons, we are obligated to accept the position defended by the argument that most successfully satisfies the conditions of a good argument. Otherwise, since one could almost always claim that one has encountered no absolute proof, one could leave unresolved virtually every issue in contention. We (and others) have tried to show that objective criteria are available for determining when one is in the presence of a good argument, so it is clearly possible to settle a disputed issue by force of argument. Judges and juries do it routinely, and there is no reason why the rest of us cannot do it as well. When your opponent presents a better argument than yours, appreciatively accept its conclusion and consider the issue settled.

No argument, however, may be regarded as permanently successful. There is always the possibility that new evidence will come to light that will raise new doubts about a position held on what were thought to be good grounds. Under these conditions, further examination is always appropriate. Pride in holding a position defended by a good argument in the past should not become an obstacle to reopening the issue

in the present if conditions warrant it. The principles of fallibility and truth-seeking are as important at this point as they were in the original inquiry.

The new doubts, however, should not be the same old doubts in new clothing. Reopening the issue should come only as a consequence of uncovering new or reinterpreted evidence not considered in the earlier treatment of the issue. Otherwise, the reexamination of the issue is the worst form of the violation of the resolution principle—simply a device to continue to haggle over the same ground.

ASSIGNMENTS

A. Submit an argument that you have read or heard within the past week that defends a position on a current controversial social, political, moral, religious, or aesthetic issue. You may find such arguments in the Letters to the Editor section in newspapers or magazines, in editorials, op-ed pieces, speeches, advertisements, classroom lectures, and conversations with fellow students. Cut out, photocopy, or transfer the argument from its source and tape it on a separate page from your typewritten analysis of it. The original argument can then be photocopied and used in class for discussion and further analysis. Using the principle of charity and your own words, reconstruct the argument into standard form, distinguishing the premises from the conclusion, making it the clearest argument possible consistent with the premises given or implied. Enclose in brackets any implicit premises or implicit conclusion. Label each of the parts of the argument.

B. Using the procedure modeled in “Applying the Criteria to Arguments” in this chapter, point out any violations of the criteria of a good argument in the reconstructed argument in assignment A. Then, using the suggestions for strengthening weak arguments in this chapter, suggest how the premises might be altered to strengthen the argument. Evaluate the overall quality of the argument on a five-point scale (excellent, good, fair, poor, or bad).

C. Bring to class an argument in support of a position on a controversial issue that you have heard or read recently and found to be persuasive. Reconstruct the argument in standard form. Use all of the criteria of a good argument to explain why the argument was persuasive to you.

D. Discuss in class the reasons why we all seem to have difficulty in following the resolution principle. If an argument meets all the criteria of a good argument, should all participants in the discussion accept its conclusion?

E. Do you agree that the “flag-burning” argument in this chapter meets all the criteria of a good argument. If not, which of the criteria does it fail to meet? If you conclude that it does not violate any of the criteria, are you prepared to accept its conclusion? Why or why not?

WHAT IS A FALLACY?

CHAPTER

4

This chapter should help you to:

Understand a fallacy as a violation of one of the five criteria of a good argument so that the focus in argumentation is always on the construction of good arguments.

Become skillful in using the self-destructive and the absurd counterexample methods of fairly and constructively attacking a fallacy in an argumentative context.

A FALLACY IS A VIOLATION OF A CRITERION OF A GOOD ARGUMENT

A fallacy is a violation of one of the criteria of a good argument. Fallacies, then, stem from one or more of the following:

A structural flaw in the argument

A premise that is irrelevant to the conclusion

A premise that fails to meet the standards of acceptability

A set of premises that together are insufficient to establish the argument's conclusion

A failure to give an effective rebuttal to the anticipated criticisms of the argument

Any argument that fails to satisfy one or more of these criteria is a fallacious one.

A NEW THEORY OF FALLACY

This understanding of the notion of fallacy has emerged from my own study of arguments and is not a common one. I have found that arguments that fail to bring others to the conclusion sought not only violate one or more of the five criteria of a good argument, they may violate a criterion in a number of different ways, all of which share some common features with other violations of that same criterion. Some of these violations are so common that a name has been attached to them. Logicians have traditionally focused on grouping these *named* fallacies into categories that are loosely based on some shared property of the mistakes. For them, it appears that a fallacy is simply a mistake to avoid in argumentation; it is just one of those items on a list of things that one shouldn't do. I believe that such an approach suffers from being unrelated to the nature of good arguments, is negative in tone, and is devoid of any logical link between all the fallacies.

A properly developed theory of fallacy is the key to the construction of good arguments. It helps one not only to recognize a poor argument but, more important, to understand what a good argument would look like. It is therefore related to the nature of good arguments, it is positive in tone, and it logically connects all named and unnamed fallacies together as violations of one or more of the five criteria of a good argument.

A fallacy is a mistake in an argument that violates one or more of the five criteria of a good argument, but it may violate a criterion in a number of different ways, all of which share some common features with other violations of that same criterion.

Fallacies are mistakes in reasoning that typically do not seem to be mistakes. Indeed, the word “fallacy” comes from “to deceive” or “deceitful” in Latin and Old French. Fallacious arguments usually have the deceptive appearance of being good arguments. This perhaps explains why they so often mislead us. Such deceptiveness, of course, may be unintentional on the part of the arguer. But it really doesn't matter whether the mistake was intended or not; a mistake is a mistake, regardless of the arguer's intention.

In most cases, fallacies are mistakes made by those who construct or present arguments for our consideration. However, those to whom such arguments are addressed may also be guilty of faulty reasoning if they fail to recognize the faulty reasoning and inappropriately accept the conclusion of the argument. If they accept a bad argument as a good one, they are, in effect, making the same argument and thus bear the same responsibility for its faulty character—just as a person who accepts the conclusion of a good argument is actually making the same good argument and should be credited with being a good thinker.

NAMED VERSUS UNNAMED FALLACIES

To be able to identify a particular pattern of flawed reasoning by name serves an important function. If a mistake in reasoning is so common that a name has been assigned to it, we should be considerably more confident about our assessment of its faulty character when we encounter it in an argument. It is intellectually reassuring

to discover that particular patterns of reasoning have been specifically identified by experts in argumentation as fallacious, even to the point of having been assigned a name.

To say of an argument simply that it is “illogical” or that “something seems wrong with it” is not very helpful in eliminating its problems. This is analogous to the situation of one who does not feel well, goes to a physician, and is told “You’re sick!” If a medical problem is to be treated effectively, the problem must first be diagnosed. If the physician is well acquainted with the symptoms of identifiable or named medical problems, he or she is more likely to diagnose the patient’s problem correctly and then to respond to it appropriately.

If a problem in reasoning is to be treated effectively, we must first identify the problem. This diagnosis entails specifying precisely what makes the argument fallacious. If we are well acquainted with the features of particular faulty patterns of reasoning, we are more likely to identify the mistake correctly and put ourselves in a position to respond to it effectively.

It should be clear by now that a fallacy does not have to have a name in order to be a fallacy. In fact, most of the fallacies that one will encounter in real-life arguments do not have a name. Neither is it necessary to know the names of fallacies in order to assess the merit of an argument. Indeed, our evaluations of the five letters to the editor in the previous chapter, you may have noticed, were carried out with little reference to any particular or named fallacy, although some of the mistakes found there did have names. So you can see that it is not necessary to know or to remember the names of particular fallacies in order to evaluate the merit of an argument. It is sufficient to be able to recognize features of the argument that may violate one or more of the five criteria of a good argument, although recognizing the mistakes by name or by identifiable pattern will often make the task easier. Nevertheless, even if you forget every named fallacy that will be addressed in this text, the theory of fallacy exhibited here is broad enough to give you a lifelong skill in evaluating arguments, simply by knowing the five criteria.

ORGANIZATION OF THE FALLACIES

The organization of the fallacies in this book, as we have explained, is dictated by the criteria of a good argument. Each type of fallacy treated here is either a species of a structural flaw, an irrelevant premise, an unacceptable premise, insufficient grounds, or a failure to provide an effective rebuttal to anticipated criticisms. Some of these named fallacies, however, share some common features and can be grouped into subclasses. For example, there are a number of begging-the-question fallacies, all of which commit the same basic error, even though each does so in a distinguishable way.

Each of the commonly committed fallacies is assigned to a subclass or category of fallacies under each of the five criteria of a good argument (see the table “Theory of Fallacy”). Generally, the begging-the-question fallacies, the fallacies of inconsistency, and the fallacies of deductive inference belong to the class of structure-related fallacies. The fallacies of irrelevant premise and the fallacies of irrelevant appeals belong to the class of relevance-related fallacies; the fallacies of linguistic confusion and unwarranted assumption fall into the general class of acceptability-related

TABLE 4.1 | THEORY OF FALLACY

Structure	Relevance	Acceptability	Sufficiency	Effectiveness of Rebuttal
<i>Begging-the-Question Fallacies</i>	<i>Fallacies of Irrelevant Premise</i>	<i>Fallacies of Linguistic Confusion</i>	<i>Fallacies of Missing Evidence</i>	<i>Fallacies of Counterevidence</i>
Arguing in a Circle	Genetic Fallacy	Equivocation	Insufficient Sample	Denying the Counterevidence
Question-Begging Language	Rationalization	Ambiguity	Unrepresentative Data	Ignoring the Counterevidence
Complex Question	Drawing the Wrong Conclusion	Misleading Accent	Arguing from Ignorance	
Question-Begging Definition	Using the Wrong Reasons	Argument by Innuendo	Contrary-to-Fact Hypothesis	<i>Ad Hominem Fallacies</i>
		Misuse of a Vague Expression	Fallacy of Popular Wisdom	Abusive <i>Ad Hominem</i>
<i>Fallacies of Inconsistency</i>	<i>Fallacies of Irrelevant Appeal</i>	Distinction Without a Difference	Special Pleading	Poisoning the Well
Incompatible Premises	Appeal to Irrelevant Authority		Omission of Key Evidence	Two-Wrongs Fallacy
Contradiction Between Premise and Conclusion	Appeal to Common Opinion	<i>Unwarranted Assumption Fallacies</i>		<i>Fallacies of Diversion</i>
	Appeal to Force or Threat	Fallacy of the Continuum	<i>Causal Fallacies</i>	Attacking a Straw Man
<i>Fallacies of Deductive Inference</i>	Appeal to Tradition	Fallacy of Composition	Confusion of a Necessary with a Sufficient Condition	Trivial Objections
Denying the Antecedent	Appeal to Self-Interest	Fallacy of Division	Causal Oversimplification	Red Herring
Affirming the Consequent	Manipulation of Emotions	False Alternatives	<i>Post Hoc</i> Fallacy	Resort to Humor or Ridicule
False Conversion		Is-Ought Fallacy	Confusion of Cause and Effect	
Undistributed Middle Term		Wishful Thinking	Neglect of a Common Cause	
Illicit Distribution of an End Term		Misuse of a Principle	Domino Fallacy	
		Fallacy of the Mean	Gambler's Fallacy	
		Faulty Analogy		

fallacies; the fallacies of missing evidence and causal fallacies are categorized in the class of sufficiency-related fallacies; and fallacies of counterevidence, *ad hominem* fallacies, and fallacies of diversion, are in the category of effectiveness of rebuttal-related fallacies.

Some fallacies may fail to meet more than one of the criteria of a good argument. In such cases, the mistake in reasoning should be construed as belonging to the criterion that describes the error's most *serious* infraction of the criteria. A good example of a fallacy that violates several criteria is one of the so-called *ad hominem* fallacies. Arguments that employ these *ad hominem* fallacies are arguments directed toward some feature of the arguer rather than the arguer's argument. A claim made about the arguer, even if true, would not count for or against the truth of the argument's conclusion and should be seen as an irrelevant premise. An *ad hominem* fallacy, then, might be categorized as a violation of the criterion of relevance. But the more serious error committed by one who attacks the arguer rather than his or her argument is that of using a tactic that avoids addressing or rebutting the criticisms offered against one's argument. Hence, it would be more appropriate to construe the fallacy as a case of ineffective rebuttal.

Each of the next five chapters is devoted to one of the five criteria of a good argument and the specific named ways that arguments fail to meet that criterion. Even though the fallacies are grouped in terms of some common features among them, careful attention is focused on each individual fallacy. Each one is given a precise definition. Although you could memorize the definition, it is more important that you understand and translate it into your own words—as long as those words capture the distinctive features of the fallacy.

I have made no special effort to preserve the traditional names for the fallacies studied. For example, traditional Latin names are maintained in only two cases—the *post hoc* fallacy and the abusive *ad hominem* fallacy—because of the relative familiarity of these terms in ordinary discourse. In general, I have tried to assign names that give some indication of the actual character of the argument error, and for that reason I have abandoned some of the traditional nomenclature.

ATTACKING THE FALLACY

A number of strategies may be used to attack faulty reasoning whenever it is encountered. Specific strategies for particular fallacies are offered throughout the rest of the text; however, two methods of attack deserve special attention.

THE SELF-DESTRUCTIVE ARGUMENT METHOD

The first is the method of allowing the argument to self-destruct. Sometimes the easiest way to attack an argument is to reconstruct the argument into standard form and then let the argument destroy itself by having its flaw clearly exposed for all to see. In many cases, the faulty reasoning can be recognized even by someone who has no acquaintance with argument analysis.

EXAMPLE

KATE: I think that Lisa's performance of Brahms' Piano Concerto No. 2 was terrible.

LIZ: Why do you say that?

KATE: Because the way she played it was not the way the composer intended it to be played.

A simple reconstruction of this argument will immediately expose its flawed character, almost without further comment.

[Since performances of a musical work that are not in line with the composer's original intention cannot be good ones,] (implicit aesthetic premise)

and Lisa's performance of Brahms' piano concerto was not in line with his intention, (premise)

Therefore, Lisa's performance was not a good one. (conclusion)

Even though Kate is clearly using the implicit aesthetic principle found in the first premise to support her conclusion, once it is stated as starkly as it is here, it will probably seem so clearly unacceptable that even Kate may want to withdraw it. The reason that few people would regard it as an acceptable aesthetic premise is that most of us have come to expect and appreciate a performing artist's own unique interpretation of a creative work. Moreover, it is likely that in many cases we do not know what the composer's intention was. Hence, the first premise, once it is made explicit, would not be acceptable to a mature, rational person. Since the conclusion is based exclusively on that questionable claim, the argument fails to meet the demands of the acceptability principle and is therefore not a good argument.

EXAMPLE It was only three months after Harold got married that he started smoking pot. His wife must have gotten him started on the stuff.

If we convert this argument to a standard format, it looks like this:

Since Harold recently got married, (premise)

and having a new wife preceded the event of starting to smoke pot, (premise)

[and what precedes another event is the cause of that event,] (implicit premise)

Therefore, Harold's wife is the cause of his pot smoking. (conclusion)

The connection between the events of "Harold's pot smoking" and a "new wife" makes sense only if the arguer is implicitly assuming that "what precedes another event is the cause of that event." But once that implicit premise is made explicit, the arguer will no doubt find immediate fault with it. He or she may even want to withdraw it. A moment's reflection will reveal that the claim is obviously false. There is no reason to believe that the temporal priority of one event to another makes it the cause of that other event. The argument, then, self-destructs, since that implicit claim is the crucial premise supporting the conclusion concerning Harold's new encounter with the weed.

EXAMPLE Schoolteachers and professors should not seek to engage in collective bargaining. After all, very few teachers are presently involved in such tactics. There is simply very little interest in that sort of thing in our profession.

Consider this argument as it appears in standard form:

Since teachers and professors do not now engage in collective bargaining,
(premise)

[and whatever is now a practice should continue to be the practice,] (implicit
premise)

Therefore, teachers and professors should not engage in collective bargaining.
(conclusion)

Once the implicit second premise is exposed, it is unlikely that even the arguer will want to accept the highly questionable assumption that “whatever is now a practice should continue to be the practice” since he or she would likely be unwilling to apply that principle to many other practices. But since that implicit claim is the main premise offered in support of the conclusion, the argument seems to self-destruct.

Reconstructing another’s argument in standard form, without comment, and clearly exposing its faulty parts may not always have the self-destructive effect expected or desired of demonstrating to the arguer that the argument is a bad one—although it may convince others. You may therefore need to try the second major method of attacking that argument.

THE ABSURD COUNTEREXAMPLE METHOD

This second way of attacking faulty reasoning, which we call the *absurd counterexample method*, is a very imaginative and effective way of demonstrating faulty patterns of reasoning without appealing to technical jargon or rules. It is particularly effective with people who are unfamiliar with or unimpressed by the special names and distinctions logicians use.

If you wish to demonstrate the flaw in your opponent’s argument by using this method, you simply construct an argument of your own that has the same form or pattern as the faulty argument of your opponent. Construct your argument, however, so that it leads to an *obviously false* or even *absurd* conclusion. Since a good argument does not lead to an obviously false conclusion, your opponent should be able to understand, with a little help from you, that your fake argument is flawed. However, if your argument is flawed, your opponent’s argument must be flawed as well. Once you point out that there is no essential difference in the pattern of reasoning exhibited in your argument and your opponent’s argument, your opponent should be logically compelled to acknowledge the faulty nature of his or her own argument.

This method can be used to attack almost any kind of faulty argument. Suppose that an opponent uses an argument that commits the fallacy of the so-called *undistributed middle term*, a fallacy that violates the structural criterion of a good argument because it draws an invalid deductive inference.

EXAMPLE “Dan must be a Marxist. Why? Well, he is an atheist, and we know that Marxists are atheists; that is part of the Marxist ideology.” In standard form, the opponent’s argument looks like this:

Since all Marxists are atheists, (premise)
 and Dan is an atheist, (premise)
 Therefore, Dan must be a Marxist. (conclusion)

Both of the premises in this argument are true. If it is a good deductive argument, that is, one that meets all the criteria of a good argument, true premises cannot lead to a false conclusion. So is the conclusion true? One cannot answer this question unless one is assured that the argument is structurally sound. Without resorting to citing odd-sounding rules of deductive logic, one can easily demonstrate that it is *not* structurally sound, by creating a counterargument with the same structural pattern used in the original argument but with an obviously false or absurd conclusion. For example:

All library books are made out of paper, (premise)
 Dan’s kite is made out of paper, (premise)
 Therefore, Dan’s kite is a library book. (*absurd* conclusion)

The same pattern of reasoning exhibited in the first argument leads to an obviously false or absurd conclusion in the counterexample argument, even though both of the premises in the counterexample argument are true. And since a well-formed deductive argument cannot have true premises and a false conclusion, the reasoning in the counterargument must be structurally flawed. But since it is the same pattern of reasoning that is exhibited in the first argument, *that* argument is flawed as well. Just as one cannot conclude that “Dan’s kite is a library book,” one cannot conclude that “Dan must be a Marxist.”

Let us now apply this method to the more subtle so-called *fallacy of the continuum*, a fallacy that violates the acceptability criterion of a good argument because it uses a claim that is based on an unstated but highly questionable assumption.

EXAMPLE “The fetus is a human being at birth. Right? And it certainly did not suddenly become a human being at delivery. In other words, it would be silly to say that a fetus is a human being at birth and not a human being a minute earlier or an hour before that or a day or a month before that. At no particular time in the growth of the fetus would you be able to say rationally that the fetus suddenly changes from a non-human being to a human being. So the fetus has to be just as much a human being at conception as it is at delivery.” In standard form, this argument may be reconstructed in the following way:

[Since conception and delivery are extremes connected by small intermediate differences,] (implicit premise)
 and at no particular time in the nine months from conception to delivery does a fetus suddenly change from a non-human being to a human being (premise)
 [because contraries or extremes connected by small intermediate differences are very much the same,] (implicit subpremise)

and it would be arbitrary or irrational to insist that at some particular point between the extremes they suddenly become different, (premise)
 and a fetus is a human being at delivery, (premise)

Therefore, a fetus is a human being at conception. (conclusion)

Since the form of this argument appears to be structurally sound, to determine whether the conclusion is true, we will focus on whether the premises are acceptable or true. One way to do this is to construct an absurd counterexample argument using premises similar to this argument to see whether they can lead to an obviously absurd conclusion.

ABSURD COUNTEREXAMPLE An atmospheric temperature of 100°F is regarded as hot. Right? And it certainly did not suddenly become hot at 100°F. In other words, it would be silly to insist that a temperature that is one degree, or five, or ten degrees less than 100°F is not hot. And at no time would you be able to say rationally that at some particular point during a period in which the temperature moves from 0°F to 100°F that the temperature suddenly becomes hot. So one could conclude that at 0°F it is just as hot as it is at 100°F.

If the arguer does not immediately see the similarity of the two arguments, and conclude that his or her argument is seriously flawed, it may be necessary to take the next step and reconstruct the absurd counterargument into standard form:

[Since 0°F and 100°F are extremes connected by small intermediate differences,] (implicit premise)

and at no particular point on the movement from 0°F to 100°F does the temperature suddenly change from non-hot to hot, (premise)

[because contraries or extremes connected by small intermediate differences are very much the same,] (implicit subpremise)

and it would be arbitrary or irrational to insist that at some particular point between the extremes they suddenly become different, (premise)

and a temperature of 100°F is hot, (premise)

Therefore, a temperature of 0°F is hot. (*absurd* conclusion)

You will notice that the premises in both arguments are the same except for the subject matter. “Birth” and “delivery” have been replaced in the absurd counterexample by “0°F” and “100°F.” But the “temperature” argument leads to an absurd conclusion. Where, then, is the problem premise? The premise that seems to be the least acceptable one is the implicit subpremise of the second premise that claims that “contraries or extremes connected by small intermediate differences are very much the same.” However, we can quickly think of a number of counterexamples to the claim of this subpremise that there is no difference between extremes. For example, there is clearly a difference between a short man and a tall man or between a grade of A in philosophy and one of F, even though there are small intermediate differences between tall and short and A and F. It is unlikely that any mature, rational person would accept such a “no difference” premise once it is made explicit and clearly exposed. And if such an absurd premise leads to an absurd or false conclusion in one argument (the absurd counterexample), it is rational to infer

that the same premise cannot be used to reach a true conclusion in another (the original argument). Hence, the “human being” argument is also fatally flawed, although its conclusion does not appear on the surface to be as absurd as the conclusion in the absurd counterexample.

EXAMPLE

SENATOR WELLS: Senator Sieck has not endorsed the bill to cut off funding for the war in Iraq; we can therefore assume that he opposes it.

If Senator Wells can legitimately draw this conclusion from her nonendorsement premise, she could also draw similar conclusions claiming Sen. Sieck’s opposition to the Red Cross, marriage, motherhood, God, and good penmanship, because he has not endorsed any of them either. But such conclusions would be absurd, which demonstrates the faulty nature of Sen. Wells’s fallacious “appeal to ignorance” argument.

There are two primary ways of attacking fallacious reasoning. Either reconstruct the argument in standard form and let the argument self-destruct by virtue of having its questionable feature clearly exposed or create a counterexample with the same questionable feature as the target argument and show how it leads to an obviously absurd conclusion.

It is often difficult to produce an example of an absurd argument spontaneously, so it might be wise to keep examples in mind for most of the named fallacies. Many of the “Attacking the Fallacy” sections in the following chapters provide particular examples for such a purpose.

The absurd counterexample method of confronting others with their mistakes in reasoning is not easy to master. It requires considerable practice and imagination, and a thorough understanding of the most common patterns of faulty reasoning. You will find, however, that this method is sometimes easier and more effective than trying to use technical language to explain to your opponent the sometimes complex nature of the particular fallacy that he or she has committed.

RULES OF THE FALLACY GAME

Argumentation, like sports and many other activities, must be conducted in accordance with certain ground rules. In this case, however, the rules I have in mind are not the rules governing effective rational discussion. We have already provided twelve principles for that purpose. The ground rules I am referring to here are the rules of good sportsmanship. If you wish to maintain friendly relationships with your verbal opponents, and if you hope ultimately to win your point with the least amount of embarrassment and bitterness, I suggest you use the following guidelines.

First, don’t be a fallacy monger. Some people, with a little knowledge of fallacious reasoning, develop a kind of obsession with identifying fallacies in the utterances of others. They sniff suspiciously at every argument and point of debate. Such pouncing on others often creates alienation. Several students have reported to me that while taking my course in logic, they experienced considerably more difficulty in relating to their friends, parents, and other professors. Perhaps these difficulties stem from a

kind of fallacy mongering, wherein one attempts to point out, in a pedantic fashion, all the fallacies in even the most casual comments of friends and acquaintances.

Second, confront an opponent with his or her fallacious reasoning only when you are convinced that the opponent has reached an unwarranted conclusion as a result of violating one or more of the criteria of a good argument, or in order to explain why you find the conclusion of the argument unacceptable. To point out questionable features of an argument that have no significant bearing on the basic thrust of the argument may only delay the progress of the debate and divert attention away from the point at issue.

Third, when you yourself are caught committing a fallacy, admit the mistake and make the appropriate adjustments in your thinking. Don't try to deny the charge or explain it away by making excuses or by claiming you were misunderstood. Don't be a sore loser.

Finally, avoid the word "fallacy" altogether, if possible. There are subtle ways of informing verbal opponents that they have committed an error in reasoning without having to shout, "Aha! That's a fallacy!" Because names assigned to fallacies vary from list to list and because people often object to technical jargon, the wisest course of action is to find ways of focusing attention on the pattern of faulty reasoning itself. Be imaginative. Find ways of challenging the reasoning processes of others without alienating them or causing them unnecessary embarrassment. After all, our purpose is to assist people in thinking more clearly, not to catch them in a fallacy.

ASSIGNMENTS

A. Recall a recent conversation that you were a part of or a lecture or speech that you heard in which a speaker made what you think is a logical error in reasoning. Try to reconstruct the context of the error or fallacy and try to determine which of the five criteria of good argument the error might have violated. Try to create a name for the pattern of reasoning involved.

B. Read the first of a series of "emails to Jim" at the end of the next chapter (Assignment G in Chapter 5 and also in following chapters). Written by Jim's dad, they are fictional pieces that I created out of my own experience dealing with attacks on the philosophical examination of religion over many years. The emails are presented strictly as enjoyable exercises. The five extended pieces of bad reasoning together incorporate each of the sixty fallacies presented in this text. Each of the fallacies is committed only one time. Each number represents the presence of a named fallacy immediately preceding it. Do Dad's arguments appear to be fallacious to you? If not, you may have just experienced how deceptive fallacious reasoning can be, since every one of his arguments is a piece of fallacious reasoning.

C. Even though you probably do not know the name of each fallacy Dad committed in his first email to Jim, try to describe in your own words what mistake in reasoning he commits in each of the eleven patterns of bad reasoning and try to create your own name for it.

FALLACIES THAT VIOLATE THE STRUCTURAL CRITERION

This chapter should help you to:

Define or describe in your own words the essential features of each of the named fallacies that violate the structural criterion of a good argument.

Recognize, name, and explain the faulty pattern of reasoning in each of these fallacies when you encounter it in ordinary discourse or discussion.

Make use of effective strategies for attacking or helping others to correct their faulty reasoning when they commit any of these fallacies.

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.

Each of the fallacies discussed in this chapter violates the structural criterion of a good argument, in that it has some structural flaw that prevents its conclusion from following either *necessarily* or *probably* from the premises. Therefore, none of these arguments can do what good arguments are supposed to do—provide us with good reasons to accept their conclusions. We will show in the case of each structural fallacy why no acceptable conclusion can or should be drawn from an argument that contains one of them.

The flaw in each case is a structural one because discovering it does not derive from any knowledge of the argument's content. If symbols were substituted for

each of the main parts of the argument, we would see only the form or structure of the argument. By looking solely at that structure, one could determine that it would be inappropriate to draw any conclusion from the argument's premises.

This chapter treats several different types of these structural fallacies. The *begging-the-question fallacies* are flawed because they assume, in a variety of ways, the truth of the conclusion in their premises. Hence, the premises provide no good reason to accept the conclusion. The *fallacies of inconsistency* are flawed because they use premises that are incompatible with one another or they draw a conclusion that contradicts one of the premises. All of the *fallacies of deductive inference* are flawed because they violate well-established rules of deductive logic.

BEGGING-THE-QUESTION FALLACIES

An argument may assume the truth of its conclusion in its premises in at least four different ways, so each of these ways of begging the question has its own name. The *arguing-in-a-circle fallacy* actually uses the very conclusion that the arguer is trying to establish as one of its premises. One who commits the *question-begging-language fallacy* uses language that implicitly assumes the truth of his or her conclusion about the issue. In the case of the *complex-question fallacy*, the arguer asks a question in a way that implicitly assumes a particular answer to, or assumes a position on, an unasked question about an issue that is still open. Finally, the *question-begging definition fallacy* uses a highly questionable definition of a key term in its premises, which has the effect of making the arguer's conclusion "true by definition."

In each of these four ways of begging the question, there is the appearance of evidential support, but the evidence is bogus because it is actually a form of the conclusion. An argument, by definition, is a claim supported by at least one other claim. If we interpret "other" to mean "different," no "other" claim is actually provided in support of the conclusion. For that reason, a question-begging argument is structurally flawed, in that it fails to meet the requirements of a well-formed argument.

ARGUING IN A CIRCLE

DEFINITION *Either explicitly or implicitly asserting, in the premise of an argument, what is asserted in the conclusion of that argument.*

The arguing-in-a-circle fallacy uses its own conclusion as one of its premises. Instead of offering supporting evidence for the conclusion, it simply asserts the conclusion as its "evidence." This fallacy is probably the most common of all the fallacious arguments you will come across. For example, while trying to defend a position on a controversial issue, you probably have encountered those who defend an alternative position by just declaring that their position is true simply "because it is true." Such an argument may not always be expressed so blatantly, but it is the actual form of your opponent's argument, and it begs, or assumes a position on, the very question at issue.

As suggested earlier, this mistake can easily be detected in the absence of any knowledge of the specific content of the argument. In standard form, it looks like this:

Since A, (premise)

Therefore, A. (conclusion)

Since the argument gives no reason other than its conclusion as evidence for its conclusion, it does not actually function as an argument. Of course, no one is likely to argue in such a nakedly circular way. In real cases, the premise is more likely to be one that *implicitly* assumes the truth of the conclusion. Consider, for example, the person who argues that God exists because he or she does not want to be sent to hell. Such a person would be concerned about the prospect of being sent to hell only if he or she had already assumed that there is an existing God who would send someone there. But a *premise* that God exists does not support the *conclusion* that God exists.

When the conclusion explicitly appears as a premise, it is usually stated in different words or in a different form. The circularity of the argument is therefore not always easy to detect. It is particularly difficult to detect if the questionable premise and the conclusion are widely separated in the argument. Imagine the difficulty of recognizing an instance of circular reasoning that is spread over the whole of an essay, a chapter, or even a book.

The circular argument, it could be said, only pretends to establish a claim. It uses a premise that probably would not be regarded as true unless the conclusion were already regarded as true. Therefore, once you have analyzed the basic structure of a circular argument, you will see that it says nothing more significant than “A is true because A is true.”

EXAMPLE One of the simplest and most easily detected forms of circular reasoning uses a single premise that is actually only a restatement of the conclusion in different words. Consider the following argument: “To use textbooks with profane and obscene words in them is immoral because it is not right for our children to hear vulgar, disrespectful, and ugly words.” Since “not right” means the same thing as “immoral” and “vulgar, disrespectful, and ugly” mean the same things as “profane and obscene,” the form of the argument is clear: “A because A.”

EXAMPLE

DYLAN: This college is very paternalistic in its student policies.

ROMAN: What reasons do you have for saying that?

DYLAN: Because they treat the students like children.

In this particular argument, Dylan may think that he is giving a reason for why the college is paternalistic, but at best he is only explaining what the word “paternalistic” means. But Roman did not ask for a definition of paternalism. He asked Dylan for “reasons” for making the claim. Dylan, however, gave no such reasons; he merely defined his key term; there is no argument.

EXAMPLE “Mr. Goolsby cannot be regarded as a competent music critic because he is biased against all forms of modern, especially atonal, music. And the reason that he doesn’t like it is that he simply doesn’t have the background and ability to evaluate it properly.”

The circularity of this argument can be shown by pointing out its structure:

Since Mr. Goolsby is biased against modern music, (premise)

because he does not have the background and ability to evaluate it properly,
(subpremise)

Therefore, Mr. Goolsby is an incompetent music critic. (conclusion)

The subpremise supporting the first premise claims that Mr. Goolsby “does not have the background and ability to evaluate music properly,” which means the same thing as “is an incompetent music critic.” Hence, the question-begging support for the premise fallaciously uses Goolsby’s alleged incompetence as a reason for his incompetence.

ATTACKING THE FALLACY If you are to avoid being misled by those who argue in a circle, you must keep a very keen eye on the logical structure of arguments. Make sure that no premise is simply an equivalent form of the conclusion or a premise that implicitly assumes the truth of the conclusion. If the argument is an extended one, you may miss the sameness of the premise and conclusion if you are careless in your attention or your memory is faulty.

You may attack circular reasoning directly by calling attention to the fact that the conclusion has already been assumed to be true as a part of the evidence. You will need to carefully identify for your opponent the questionable claim that is doing double duty in the argument. You can do this by reconstructing the argument into standard form, if necessary, which will clearly demonstrate how the premise and the conclusion actually make the same claim.

You might also demonstrate the fallacious character of another’s arguing in a circle by giving an obvious or absurd counterexample of it. For instance, if you argued that “reading is fun because it brings me lots of enjoyment,” it should be clear to your opponent that no claim has been established by such an argument. Yet it clearly has the same structure, namely “A because A,” as the more subtle argument of your opponent. So neither can *its* conclusion be established by such an argument.

In many cases, those who argue in a circle will readily agree that they assume the conclusion to be true—because they are genuinely convinced of its truth. But arguers need to be reminded that in an argument, one’s personal beliefs or convictions concerning the truth of a claim cannot be used as evidence for the truth of that claim.

QUESTION-BEGGING LANGUAGE

DEFINITION *Discussing an issue by means of language that assumes a position on the very question at issue, in such a way as to direct the listener to that same conclusion.*

One who commits the fallacy of question-begging language prematurely assumes, either deliberately or carelessly, that an unsettled matter that is at issue has already been settled. By the arguer’s choice of language, the listener is subtly directed to infer a particular conclusion, although no good reasons are presented for doing so. Such slanted or prejudicial language often influences the outcome of an inquiry by generating a response other than what the facts might support. Therefore, a special

effort should be made to use only *descriptive* or *neutral* language in an argumentative context when an important issue is being decided.

Since an argument purports to give reasons to support a conclusion, it cannot smuggle that conclusion into the argument by means of a subtle use of language that assumes a position on the very issue in question. Since no supporting evidence is actually given in such cases, no acceptable conclusion can or should be drawn.

EXAMPLE If Natalie testifies in a contract dispute that she was “cheated” when the very purpose of the court proceeding is to decide that issue, she would be using question-begging language. In standard form, her implicit argument looks like this:

Since I was cheated, (premise)

Therefore, you should conclude that I was cheated. (conclusion)

A non-question-begging way of testifying in the contractual matter would be for Natalie simply to describe what happened and then let the court decide whether she was “cheated” or whether some other conclusion should be drawn.

EXAMPLE Suppose that you are engaged in a dispute about the moral permissibility of abortion, and the main issue is whether the fetus is to be considered a human being. If one of the discussants constantly refers to the fetus as “the baby,” he or she has begged the question on the very point at issue. The argument, in effect, says that “since the fetus is a baby human being, the fetus is a human being.” This translation of the argument makes it clear why the use of such language in an argument renders it flawed.

EXAMPLE A form of this fallacy with which most of us are quite familiar is one in which an arguer “plants” a proposed answer to a question at issue by the manner in which he or she asks the question. This variation of the fallacy of question-begging language even has its own name: the *leading question*. Suppose Professor Scruggs says to a student: “You aren’t serious about nominating Professor Reiff as ‘Teacher of the Year,’ are you?” Professor Scruggs plants the conclusion that she wants the student to come to, which is that Professor Reiff should not be nominated, but she provides no reason why he should not be nominated, other than the implicit premise that he should not be nominated.

The argument in each of these examples has no actual evidence, for the alleged evidence in each case is simply the conclusion in disguise. Since the argument has no premise other than the conclusion restated, it fails to meet the structural requirement of a good argument.

ATTACKING THE FALLACY Perhaps the best way to confront a person who has committed this fallacy is to point out how his or her language might prevent the discussion of the issue from being a genuinely open one. If your opponent will not acknowledge that his or her language may prevent an objective mutual assessment of the merit of the claim, it may be an issue about which he or she simply cannot be objective. If, for example, a participant in a discussion of whether or not another’s act was immoral insists on representing the act with words such as “egre-

gious,” “deplorable,” or “unforgivable” and genuinely believes that he or she is simply being *descriptive*, it may not be possible for you to help that person assess the issue impartially on the basis of the evidence available.

Above all, do not be intimidated by the language of the question-beggar, particularly when he or she introduces a claim by phrases such as “obviously,” “any ten-year-old knows,” or “any fool knows.” This language suggests that the speaker thinks the issue does not really deserve any further discussion or investigation. Such expressions function as defenses against having one’s position attacked, and if you wish not to be the victim of such tricks, you must risk the appearance of being naive, uninformed, or even mentally deficient by announcing, “Well, it’s *not* obvious to *me*.”

To confront the leading-question form of the fallacy, you should find some way to reveal to the questioner that he or she is asking you to grant an assumption that is part of the question at issue. Point out that you think the position you are being implicitly asked to support requires more evidential support than it now has, or at least that you are not now ready to support the position on the basis of the available evidence. Of course, if the position the questioner holds seems to be a reasonable one or is one you find sufficiently well supported in other contexts, then it may be that no fallacy has been committed.

COMPLEX QUESTION

DEFINITION *Formulating a question in a way that inappropriately presupposes that a definite answer has already been given to an unasked question about an open issue or that treats a series of questions as if the same answer will be given to each of the questions in the series.*

The complex question becomes a question-begging fallacy when the unasked question is about an issue that is not yet settled. Consider the question, “What did you do with my watch after you stole it?” If the respondent has not admitted to stealing the watch, he or she cannot answer such a question without granting a questionable assumption.

Nearly all questions are complex in the sense that they make assumptions. For example, if I were to ask, “When are they going to announce the Academy Award nominations?” I would be assuming that they *are* going to announce them, and no one is likely to accuse me of begging the question. A question is not fallacious if the questioner has good reason to believe that the respondent would be quite willing to grant the questioner’s assumptions. It begs the question only when it is about an issue that is still open.

Another form of the complex question is one that improperly assumes that the respondent will give the same answer to each question in a series of questions. In this question, “Will you take me home tonight and let me pick up some things from the grocery store on the way?” the questioner has assumed that the answer to each part of this compound question will be the same. Unless the questioner has reason to believe that the same answer will suffice for both questions, he or she has begged the question.

Both types of complex question have a structural flaw. The arguer or questioner has assumed a position on a questionable issue and then has used that assumption to support the same questionable position. Look at our “watch” and “take me home tonight” examples after they have been reconstructed into standard form.

Since you stole my watch, (premise)

Therefore, you stole my watch. (conclusion)

and

Since all cases of your taking me home tonight will be cases of your also taking me to the grocery store tonight, (premise)

Therefore, all cases of your taking me home tonight will be cases of your also taking me to the grocery store tonight. (conclusion)

Such arguments clearly have a structural flaw, in that they do not provide any evidence for the conclusion, which prevents them from being well-formed arguments.

EXAMPLE The most common form of this fallacy asks two questions, one of which is explicit and the other implicit. Consider the young man who asks a fellow sophomore, “What fraternity are you going to pledge?” Or the worried mother who asks her thirty-year-old son, “When are you going to settle down and get married?” In each case, the questioner has assumed a positive answer to an implicit question, namely, that the sophomore has decided to pledge a fraternity and that the son has decided that he will someday get married.

EXAMPLE Consider the version of the complex question that treats a series of questions as if it involved only one question: “Are you and Nancy going to the Keller-Trent wedding and to the reception next Saturday, even though you and she were not invited?”

This innocent-looking question actually involves at least seven different questions: Are you going to the wedding? Are you going to the reception? Is your wife Nancy going to the wedding? Is she going to the reception? Are the wedding and reception being held next Saturday? Are you invited to the wedding? Is Nancy invited to the wedding? It might be the case that I would answer positively in response to one or more of these questions but negatively in response to one or more of the others. Yet the question as initially posed is asked in such a way that either a simple “yes” or “no” is called for. One may, of course, answer “yes” to all seven questions or “no” to all seven questions, but when one considers the possible combinations of all responses that may be given to the seven separate questions embedded in the original, it turns out that there are 128 of them. If there is a possibility that the wedding and reception may not be on the same day, there are 256 questions. Check it out! If the question is not divided, the questionable assumption that is granted to the questioner is that the same answer will be given to each of the questions.

EXAMPLE “Why are the children of divorced parents more emotionally unstable than those children raised in unbroken homes?” This is a complex question, for

the questioner has assumed a position on a questionable claim, namely, that children of parents who are divorced are emotionally more unstable than children of parents who are not divorced. This claim must be established before the question calling for an explanation of such a phenomenon can be appropriately asked. Indeed, if the implicit questionable substantive claim can be shown to be false, the call for explanation would be out of order. However, as it was originally asked, the question does not consider the possibility that the implicit assumption may be false. Hence, the respondent is “begged” to grant the truth of that assumption.

ATTACKING THE FALLACY You may attack the complex question in a number of ways. First, refuse to give a straightforward positive or negative response to such a question. If the asker fails to understand your reticence, ask: “Have you stopped cheating on your income tax?” He or she will get the idea.

Second, point out the troublesome assumption in the question and indicate that the issue has not yet been decided. Give assurance, however, that you are prepared to discuss the issue at any time.

Third, insist, if necessary, that the question be appropriately divided so that each of the two or more questions can be answered separately. After all, even the rules of parliamentary procedure give a motion to “divide the question” a priority status.

QUESTION-BEGGING DEFINITION

DEFINITION *Using a highly questionable definition, disguised as an irrefutable empirical premise, which has the effect of making the empirical claim at issue true by definition.*

The fallacy of the question-begging definition rests on a confusion between an empirical premise and a definitional premise. A *definitional premise* is simply a claim about what an important term in a discussion means. If it is a proper definition, it should be based on common usage of the term, the thinking of relevant authorities, or both, while a questionable definition would neither conform to ordinary usage nor the thinking of relevant authorities.

An *empirical premise*, however, makes an observational or factual claim. It is a claim about how things *are* in the actual world, and it is subject to correction or confirmation in the light of empirical evidence. The truth or acceptability of an empirical claim would be determined by whether it conforms to such things as the experience of our senses, the testimony of relevant authorities, and the results of appropriate experimentation.

One who commits the fallacy of the question-begging definition substitutes, intentionally or unintentionally, a questionable definitional premise for what is purported in the argument to be an empirical one. Insofar as this questionable definition assumes the truth of the arguer’s position on the empirical question at issue, the argument in which it is embedded is structurally flawed.

There are at least two clues that an arguer has made the question-begging premise switch. First, if the arguer refuses to allow contrary evidence to count against his or her “empirical” premise, there is reason to suspect that the premise is not functioning as an empirical one. A second clue that this deceptive technique

is being used could be the presence of such modifying words as “true,” “real,” or “genuine” before the key term in the discussion of an issue. Even though the arguer may strongly believe that a term *should* be defined in an unconventional way, if the definition of the term in the premises has the effect of making an empirical conclusion true by definition, then the fallacy of the question-begging definition has been committed, and its ill-begotten conclusion does not follow.

EXAMPLE Let us suppose that Biliana and Kevork are discussing whether Christians drink alcoholic beverages. If Kevork rejects Biliana’s evidence that many Christians *do*, as a matter of fact, drink alcoholic beverages on the grounds that “if they were *real* Christians, they would not drink,” it becomes clear that he is not addressing the issue as an empirical question. Instead, he is *defining* a Christian as one who would not drink. But Kevork’s definition of a Christian neither conforms to ordinary usage nor to the thinking of religious authorities. Moreover, if he tried to use this highly questionable definition as a premise in an argument for the claim that Christians do not drink, it would beg the question at issue. It would therefore have no place in a well-formed argument.

EXAMPLE Suppose that Eric maintains the empirical claim that “true love never ends in separation or divorce.” When he is presented with examples of true love followed by divorce, he insists that such cases were not genuine cases of true love. His “evidence” that they were not cases of true love is that they ended in divorce. Eric is hereby settling the issue by definition, for his judgment is that any marriage that ends in divorce could not have been a case of true love. Hence, no empirical evidence is allowed to count against his claim. When such evidence is presented and rejected, it should become evident to other discussants that the alleged empirical claim is really a definitional one. Eric’s argument in standard form clearly reveals the flaw:

Since true love is defined as a love that will never end in divorce or separation,
(premise)

Therefore, true love will never end in divorce or separation. (conclusion)

If Eric wishes to define true love as love that would not end in separation or divorce, that is his prerogative, even though such a definition is highly questionable. However, if he hopes to lead rational people to an empirical conclusion, he will not use his strange definition and act as if it is an empirical premise and then not allow anyone to offer evidence against it.

EXAMPLE When a popular politician switched from the Republican Party to the Democratic Party several years ago, a number of his critics, especially Republicans, claimed that he had obviously not been a “true-blue” Republican or he wouldn’t have switched political parties. The only “evidence” the critics could cite for his “non-true-blue” Republicanism was that he switched parties. But no evidence was allowed to count against the claim. In other words, a “true-blue” Republican was *defined* as one who would never leave the Republican Party. Hence, the only matter

that is actually in dispute is whether the definition is an appropriate one; there is no empirical claim at issue.

ATTACKING THE FALLACY If you suspect that an arguer has employed a question-begging definition in an argument, ask the arguer whether the premise is a definitional or an empirical one. If he or she is puzzled by your question, you might need to explain the difference between them. One way to help test whether the premise in question is empirical is to ask whether the arguer can identify any evidence that would count against the claim. If he or she cannot name any such evidence, the claim at issue is probably definitional.

If the claim is discovered to be definitional, it is obviously not subject to falsification by counterevidence, but the question-beggar should at least be prepared to defend his or her questionable definition against other definitions that seem to be based more securely on common usage or the thinking of relevant authorities. To move the discussion forward, you might suggest one of these more appropriate definitions and ask the arguer on what grounds his or her definition is thought to be a better one.

You might also question the arguer on whether it is likely that the questionable definition would be agreed to by most people who use the term in question and whether such a definition is close to any definition in a published dictionary. If necessary, you might together consult a dictionary in order to help settle the issue.

ASSIGNMENTS

A. Begging-the-Question Fallacies For each of the following arguments, (1) identify the type of begging the question illustrated, and (2) explain how the reasoning violates the structural criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

1. David says to his colleague Richard: “When are you going to show some moral courage and boycott Wal-Mart?”
- *2. **SEAN:** The criminal mind simply cannot be rehabilitated. The prisons are wasting time and resources.
JEANNIE: That’s not true. I know several criminals who have been completely rehabilitated as a result of their prison experiences.
SEAN: Well, then, those people must never have had a truly criminal mind.
3. It’s supposed to be in the low twenties tonight, so surely we’re not going to the football game, are we?
- *4. **ROY:** Why should I do what the Bible says?
DOROTHY: Because the Bible is the inspired word of God.
ROY: But how do you know that the Bible is actually divinely inspired?
DOROTHY: Because it says in the third chapter of II Timothy that “all Scripture is given by inspiration of God.”
- *5. One of Senator Fisher’s constituents asks, “Are you planning on supporting our troops and voting for the president’s defense budget?”
6. **CELESTE:** I’ve thought about this for a long time, and I’ve come to the conclusion that sane people do not commit suicide.

CHRIS: What about your friend, Laura, who surprised you and everyone when she committed suicide? *She* was certainly not insane.

CELESTE: Well, she certainly seemed sane, but I guess we didn't know the real story.

7. **PROFESSOR TAVERNER:** Evolutionary development has demonstrated that only the fittest of organisms survive.

STUDENT: How has that been demonstrated?

PROFESSOR TAVERNER: Well, if organisms survive, they must be fit, right?

STUDENT: Yes, but how do you know that it is only the most fit of the organisms that survive?

PROFESSOR TAVERNER: Those creatures that have survived obviously were better fitted for survival than those that did not survive.

- *8. **ELIJAH:** Don't you have any other houses in our price range to show us?

REAL ESTATE BROKER: I've shown you everything in town that is available. Well, there is one other *tacky* little house that we could look at . . . if you want.

FALLACIES OF INCONSISTENCY

One who attempts to advance an argument that is self-contradictory commits a fallacy of inconsistency. If an argument is self-contradictory, there is an inconsistency or incompatibility among its parts, and the argument is therefore structurally flawed. And it is a very serious flaw, because being caught in a contradiction between premise and conclusion or with contradictory premises destroys the effectiveness of one's argument, and no acceptable conclusion can be drawn from the premises.

In most cases, the inconsistency or incompatibility in question is *implicit* rather than *explicit*. Cases in which the inconsistency is explicit are relatively rare because they would be so easily detectable. Statements are implicitly inconsistent if at least one of them implies or could be legitimately interpreted as implying a statement that is inconsistent with another premise or with the conclusion in the same argument.

INCOMPATIBLE PREMISES

DEFINITION *Drawing a conclusion from inconsistent or incompatible premises.*

An argument that uses premises that are not compatible with one another cannot function as a good argument, for it cannot lead one to an acceptable or true conclusion. It cannot do what arguments are supposed to do. The character of its structural flaw can be demonstrated by looking carefully at the argument's form:

Since A, (premise)

and not-A, (premise)

[No acceptable conclusion can be drawn.]

According to the *law of noncontradiction* (not both A and not-A), an argument with two contradictory premises cannot be a good one because one of the premises must be false. Thus, no acceptable or nonarbitrary conclusion can be drawn.

EXAMPLE “If God is perfectly good, all-powerful, and all-knowing, there would be no evil in the world, and yet there is evil in the world. Therefore, either God does not exist, is not all-knowing, is not all-loving, is not all-powerful, or there is no evil in the world.” This is a way of stating what philosophers and theologians call the “problem of evil.” They assume that if God is all-knowing, he *knows* about the evil; if he is all-loving, he *would want* to prevent it; and if he is all-powerful, he *could* prevent it. But evil persists! These claims are clearly incompatible. If they were used as premises in an argument, there would be an implicit contradiction between at least two of them, so no acceptable conclusion could or should be drawn. To resolve the problem of contradictory premises, at least one of the five premises would have to be false or justified in some other way.

EXAMPLE A popular ethical theory also exhibits the flaw of incompatible premises. The so-called Divine Command Theory of ethics argues that an act is right because God says it is right. His saying so makes it so. This, say its defenders, is the case with the Ten Commandments, the rules that they say God gave to us to live by. If he had given us different rules, those would be the right rules to follow. When questioned whether God could have chosen to tell his followers to rape and murder, some divine command theorists argue that God would never tell them to do those things because those acts would be wrong. Such an arguer uses incompatible premises. On the one hand, he or she is arguing that God creates or determines what is right merely by declaring what is right. On the other hand, the arguer is saying that there are certain acts that God would not declare to be right because they are in fact wrong. Let us look at the structure of this argument:

Since God’s declaring that an act is right is the sole basis of determining what is right (A), (premise)

and some acts, such as rape, God would not declare to be right, (rebuttal premise)

because they are morally wrong. (not-A), (subpremise)

[No acceptable conclusion can be drawn.]

The arguer cannot have it both ways. If God determines what is right by declaring it so, as the arguer claims in the first premise, then no act can be wrong until he declares it so (A). Yet the arguer claims in an effort at rebuttal in the second premise and its supporting subpremise that there are some acts that God would not declare to be right because they are wrong (not-A). This incompatibility must be resolved before any acceptable conclusion can be drawn.

EXAMPLE Each of us has heard a politician ask for our vote on the promise that he or she will maintain or increase all present governmental services and also lower taxes. If the politician also promises no major change in the tax or revenue structure, the first two claims appear to be incompatible. Either taxes are lowered (A) or services are maintained at the present level, which entails not lowering taxes (not-A). But it cannot be the case that both A and not-A are true. Therefore, no

acceptable conclusion can be drawn unless the implied conflict in premises is resolved.

ATTACKING THE FALLACY Since the fallacy of incompatible premises is a structural one, perhaps the best way to confront those who commit it is to translate their contradictory premises with the symbols of A and not-A, and thereby demonstrate why no acceptable conclusion can be drawn. If the arguer is not familiar with the law of noncontradiction (not both A and not-A), you may have to briefly explain how it is a necessary condition of meaningful intellectual discourse, after which he or she should either abandon the argument altogether or find some way of resolving the incompatibility of the premises.

Another way of attacking an argument that has incompatible premises is to ask the arguer what conclusion he or she would draw from the premises. Typically, one who uses contradictory claims draws no explicit conclusion, thinking the conclusion is implicitly clear. However, in an argument with contradictory premises, it is not at all clear what the conclusion is. If an arguer *does* draw a conclusion, it is simply a restatement of one of the contradictory claims—the one that he or she is defending and thinks is the “true” one, simply ignoring the contradictory false one. If the arguer insists that the premises are not contradictory, he or she is obligated to show why they are not.

It is, however, sometimes difficult to distinguish between real and apparent incompatible premises. For example, a father who is trying to convince his child that no one should be trusted is obviously making an exception of himself. If he really were making incompatible claims (“since you should trust no one, and you should trust me”), no rational conclusion could or should be drawn by the child. However, the incompatible premises are only apparent; the father has carelessly overstated the first premise. If he had said, “Don’t trust most people” or “Trust very few people,” or “Don’t trust anyone except me,” he would have had no trouble avoiding the contradiction.

CONTRADICTION BETWEEN PREMISE AND CONCLUSION

DEFINITION *Drawing a conclusion that is incompatible with at least one of the premises.*

An argument that draws a conclusion that contradicts one of the premises cannot be structurally sound. The flaw can be seen by looking carefully at the form of such an argument:

Since A, (premise)
and B, (premise)
Therefore, not-A. (conclusion)

The argument draws the conclusion of “not-A,” but such a conclusion cannot follow from the premises. According to the law of noncontradiction (not both A and not-A), the conclusion of this argument and its first premise cannot both be true. Therefore, an argument that draws a conclusion that is incompatible with one of the premises is fallacious.

EXAMPLE The classical causal argument for the existence of God seems to be a paradigm case of an argument with a conclusion that contradicts or is incompatible with one of its premises. The argument goes like this:

Since everything has a cause, (A) (premise)
 and we cannot go back infinitely into the past, (premise)
 because if the process of causation never started, we would not be here
 (subpremise)
 and we are here, (premise)
 Therefore, there must be an uncaused first cause, which is God. (not-A)
 (conclusion)

The conclusion that God was an uncaused first cause (not-A) clearly contradicts the first premise that everything has a cause (A). Unless the arguer can find a way of construing the content of the argument in a different way, this conclusion cannot be drawn, and the argument must be regarded as structurally flawed.

EXAMPLE Another popular philosophical argument commits this same error. In dealing with the so-called mind-body problem, the seventeenth-century French philosopher René Descartes argued that the mind and body are two very different entities that interact with each other, one of which, the body, occupies space and the other, the mind, does *not* occupy space. This position is known as *dualistic interactionism*. If we put the argument into standard form, it looks like this:

Since the body is physical and occupies space, (premise)
 and the mind is nonphysical and does not occupy space, (premise)
 [and experience indicates that minds affect bodies, and vice versa,] (implicit
 premise)
 Therefore, the mind and body interact with each other. (conclusion)

Since a nonspatial entity cannot causally affect a spatial entity, Descartes' conclusion is clearly incompatible with either the first or the second premise, and his critics were quick to point this out to him. Unless Descartes could find some way of reconciling the premises and the conclusion, such as rejecting either the first premise or the second premise, his conclusion cannot be drawn.

EXAMPLE Some arguments in the abortion debate contain a conclusion that contradicts a premise. Suppose Ms. Koek argues that "all human life is sacred (A), and we have an obligation not to destroy it, and abortion destroys it; therefore, abortion is wrong, except in cases of rape (not-A)." By making an exception of rape, her conclusion contradicts the first premise. She would probably not want to deny that the child of rape is a sacred human life; therefore, if she wants to correct the structural flaw in her argument, she must either eliminate the exception of rape

or alter the inclusive nature of the first premise that says that “*all* human life is sacred.”

ATTACKING THE FALLACY Since the fallacy of contradiction between premise and conclusion is a structural one, the best way to confront those who commit it is to translate the relevant premise and conclusion into the symbols of A and not-A, and thus demonstrate how the conclusion clearly contradicts one of the premises. Unless the arguer shows no respect for the law of noncontradiction, he or she should be convinced by the demonstration and either abandon the argument altogether or at least find some way of satisfactorily resolving the contradiction.

ASSIGNMENTS

B. Fallacies of Inconsistency For each of the following arguments, (1) identify the type of inconsistency illustrated, and (2) explain how the reasoning violates the structural criterion. There are two examples of each of the fallacies discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. I believe that the truth about human knowledge lies in the position of skepticism, which is the view that there is no way that we can know anything to be true, so we may as well give up the search.
- *2. Who’s to say that I’m wrong and you’re right about smoking marijuana? Each individual needs to determine what is right, and I don’t see anything unethical about using marijuana. So, you’re just wrong.
- 3. Human life is a precious gift, and no one has the right to take it away. One who murders another human being destroys that gift. This is the reason I’m in favor of capital punishment for those convicted of destroying a human life.
- 4. **BEN:** The trouble with you, Ed, is that you just can’t think outside the box. You think that if some idea is contradictory, it doesn’t make any sense.
ED: I guess you’re right. I *do* think that noncontradiction is a necessary condition of intelligible human discourse.
BEN: That’s just nonsense. That’s just your Western mindset coming through. There’s no reason to think that contradictory claims can’t be meaningful.
ED: I agree. A claim would *not* be meaningful if it were contradictory.
BEN: No, I said it *could* be meaningful if it were contradictory.
ED: And I said I agreed. It would *not* be meaningful if it were contradictory.
BEN: What’s wrong with you, Ed? Don’t you have your hearing aid turned on? You’re talking nonsense. I can’t make any sense out of what you’re saying.
ED: Exactly!

FALLACIES OF DEDUCTIVE INFERENCE

Fallacies of deductive inference violate one of the well-established rules of deductive reasoning. There are many such deductive fallacies, but we have chosen to deal with only the most commonly committed ones.

DENYING THE ANTECEDENT

DEFINITION *Denying the antecedent of a conditional statement and then inferring the denial of the consequent.*

In a conditional or “if, then” statement, the part of the sentence that comes after the “if” is called the *antecedent*, and the part that comes after the “then” is called the *consequent*. An example of a *good* conditional argument is called *affirming the antecedent*, or *modus ponens*. It has the following form:

If A, then B, (premise)
 and A, (premise)
 Therefore, B. (conclusion)

If the first two premises are true, we can be assured that the conclusion of this argument is true, for in a well-formed deductive argument, the conclusion follows from the premises with logical necessity.

However, an argument that is a *flawed form* of this conditional reasoning *denies the antecedent* of a conditional statement and then denies the consequent as its conclusion, like this:

If A, then B, (premise)
 and not-A, (premise)
 Therefore, not-B. (conclusion)

One of the rules governing conditional reasoning says that no conclusion follows from a premise that denies the antecedent of a conditional proposition. The reason such an argument is fallacious is that in denying the antecedent and then denying the consequent, the arguer fails to recognize that A is not the only reason that could bring about B. As a matter of fact, there are a number of *other* reasons that are sufficient to bring about B in addition to A, which means that A may be sufficient but not *necessary* for B’s being true. However, by denying A and then concluding that B is not true, the arguer wrongly assumes that A is *necessary* for B, that is, the *only* thing that could bring about B. Even though the premises may be true in such an argument, no conclusion follows, for the structure of the argument is fatally flawed.

EXAMPLE “If I were a heavy smoker, smoking would shorten my life. That’s why I don’t smoke. And I expect to live a long and healthy life.” There a number of other reasons that could cause B, that is, shorten one’s life. But this arguer seems to have limited it to the antecedent, the factor of smoking. He or she has treated smoking as if it were the *only* thing that could shorten life. The standard form of the argument exhibits the flaw quite clearly:

If I smoke (A), I will have a shortened life (B), (premise)
 and I will not smoke, (not-A) (premise)
 Therefore, my life will not be shortened. (not-B) (conclusion)

EXAMPLE “If capital punishment actually deterred people from committing serious crimes, then it would be justified. But as it doesn’t have that deterrent effect, it’s not a justifiable practice.” Maybe we should call this fallacy the “failure to see other reasons” fallacy. In this argument, as in all other denying-the-antecedent fallacies, there are always a number of other reasons that may bring about the consequent. In this example, a number of other reasons in addition to deterrence may be sufficient to justify capital punishment, but the arguer has treated deterrence as if it were the *only* reason that could justify capital punishment. Therefore, the denial of the effectiveness of deterrence, the antecedent, in the premises does not lead to the denial of the justifiability of capital punishment, the consequent, in the conclusion.

EXAMPLE “Professor Lane told us that we would pass his course if we passed the final exam. So I guess I failed the course, because I failed the final.” However, Professor Lane did not say that the *only* way to pass the course would be to pass the final. There may be a number of *other* ways of passing the course in addition to passing the final exam. Although passing the final may be a sufficient condition for passing the course, it is not a necessary one. Therefore, denying that the final was passed cannot lead to the conclusion’s denial that the course was passed.

ATTACKING THE FALLACY An absurd example should clearly demonstrate the structural flaw exhibited in an encountered argument that denies the antecedent:

If Newt is a dog, then Newt is an animal, (premise)
 and Newt is a not a dog, (premise)
 Therefore, Newt is not an animal. (conclusion)

If this were a well-formed, structurally sound argument, a false conclusion could not follow from the true premises. But since Newt is a cat, and we would all agree that cats are animals, the conclusion is obviously false, even absurd. Being a dog is a sufficient condition of being an animal, but it is not a necessary condition of being an animal. There are many *other* ways of being an animal. Therefore, the form of the Newt argument is flawed, and the arguer should be willing to agree that insofar as his or her argument has the same structure, it also is a flawed argument.

AFFIRMING THE CONSEQUENT

DEFINITION *Affirming the consequent of a conditional statement and then inferring the affirmation of the antecedent.*

Another example of a well-formed conditional argument is called *denying the consequent*, or *modus tollens*. This argument has the following form:

If A, then B, (premise)
 and not-B. (premise)
 Therefore, not-A. (conclusion)

Just as in the case of affirming the antecedent or *modus pollens*, if the first two premises are true, we can be assured that the conclusion of this argument is also true; for in a well-formed deductive argument, the conclusion follows necessarily from the premises.

However, an argument that is a *flawed form* of this conditional reasoning argument *affirms the consequent* of a conditional statement and then *affirms* the antecedent as its conclusion.

If A, then B, (premise)

and B, (premise)

Therefore, A. (conclusion)

One of the rules governing conditional reasoning says that no conclusion follows from a premise that affirms the consequent of a conditional proposition. The reason such an argument is fallacious is that in affirming the consequent and then affirming the antecedent as the conclusion, the arguer fails to recognize that A is not the only reason that could bring about B. As a matter of fact, there may be several *other* reasons that are sufficient for bringing about B in addition to A, which means that A is not *necessary* to B's being true. However, by affirming B and then concluding that A is true, the arguer wrongly assumes that A is the *only* thing that could have brought about B. So if B is true, A must be true. Since this conclusion does not follow, even if the premises are true, the argument's structure must be flawed.

EXAMPLE In the criminal courtroom, prosecuting attorneys frequently commit this fallacy. "If the defendant were planning on murdering his wife, he would very likely have made sure that he had a large insurance policy on her life, and that, ladies and gentlemen of the jury, is exactly what he did. You can draw your own conclusion." The existence of the insurance policy in a case like this is sometimes called *circumstantial evidence* and along with other evidence may contribute to the prosecutor's *inductive* argument for the defendant's guilt. But in this *deductive argument*, the prosecutor's conclusion does not follow with necessity because it is not a well-formed argument. Instead, it is a classic case of affirming the consequent. The flaw should be obvious in the following reconstruction:

If a husband is planning to murder his wife (A), he will have an insurance policy on her life (B), (premise)

and this husband did have a large policy on her life (B), (premise)

Therefore, he murdered (or at least planned to murder) his wife (A).
(conclusion)

The prosecutor fails to recognize that there are many *other* reasons that could be sufficient for buying an insurance policy on one's spouse and wrongly assumes that planning to murder a spouse is the only reason for buying one.

EXAMPLE "If you do very well on the SAT, you will probably get into a good college. Since you got into Centre College, which is a good school, you must have done well on the SAT." The assumption in this argument is that the *only* way to get into a good school is to get a high score on the SAT, yet there are a number

of *other* conditions that may be sufficient for getting into a good school, such as good grades, athletic prowess, and theatrical talent.

EXAMPLE “If I eat red meat after not having eaten any for a long time, I often get ill. Since I woke up sick at my stomach this morning, there must have been some red meat in that soup we ate at the restaurant last night.” Let’s look at the form of this “failure to see other reasons” fallacy:

If I eat red meat (A), I get sick (B), (premise)
 and I got sick, (B) (premise)
 Therefore, I must have eaten red meat. (A) (conclusion)

By affirming the consequent and then concluding the affirmation of the antecedent, the arguer is assuming that the only thing that could have caused his or her illness is eating red meat. This is obviously not the case.

ATTACKING THE FALLACY The absurd counterexample method is always a good way of exposing fallacious reasoning. To confront the fallacy of affirming the consequent, you might try the following absurd example: “If you have read Professor Damer’s book, you should be able to recognize and successfully attack fallacious reasoning, and you are able to do that. Therefore, you must have read Damer’s book.” Wait a minute! Are there really no *other* books out there that might do what this book does? If this absurd example doesn’t work, try the Newt absurd counterexample above, but in reverse. In other words, trade denying the antecedent for affirming the consequent. It works both ways; you just have to remember that Newt is a cat.

FALSE CONVERSION

DEFINITION *Reversing the antecedent and consequent of a conditional statement or exchanging the subject and predicate terms in a universal affirmative statement and then inferring that these converted statements retain their original truth value.*

An argument whose premise is a conditional or “if, then” statement and whose conclusion reverses the antecedent with the consequent of that statement violates a rule of deductive logic. In such cases, the conclusion does not follow from the premise. In other words, one cannot infer that if the original claim is true, the converted claim is true. For example: Although it is true that “if the lamp comes on when the switch is flipped, the light bulb is a good one,” it is *not* true that “if the light bulb is a good one, then the lamp will come on when the switch is flipped.” A number of *other* conditions have to be in place for the converted statement to be true, such as the switch being in good working order and the electrical power connected, and there being no “short” in the wiring.

The same problem exists when an arguer reverses or converts the subject and predicate in a universal affirmative statement. A *universal affirmative statement* is an “all X are Y” statement, as in “all biologists are scientists.” While it is true that “all biologists are scientists,” the converse, “all scientists are biologists,” is not true.

It is interesting to note that an “all X are Y” statement means the same thing as an “if, then” statement. For example, “all biologists are scientists” can be translated with no loss of meaning into “if one is a biologist, then one is a scientist.”

A *particular negative statement* (some X are *not* Y) cannot be converted either, but that is a much less committed form of the fallacy of false conversion and will not be treated here. However, it is not a case of false conversion to reverse the subject and predicate in a universal negative statement (no X are Y) or a particular affirmative statement (some X are Y). The reason for this is that in these two kinds of statements, the subject and predicate terms are *evenly* distributed; that is, the terms are either both distributed or both undistributed. In a universal affirmative statement and in a particular negative statement, the subject and predicate terms are *unevenly* distributed; that is, one term is distributed and the other is not. A term is *distributed* in a statement if a claim is being made about every member of the class designated by that term. A term is *undistributed* in a statement if no claim is being made about every member of the class designated by that term. (More will be said about the notion of distribution in the next section.)

EXAMPLE From the claim that religious people are those who rely on a being outside themselves, it could not be inferred that people who rely on a being outside themselves are religious. One could show this to be a false conversion by pointing out a counterexample to the converted claim, namely, that a child could rely on a being outside himself or herself, such as a parent, and not be religious at all.

EXAMPLE “If it is true that all heroin addicts started by smoking marijuana, it cannot be inferred that the converse is true, that is, that all who started out as marijuana smokers are or will become heroin addicts.” The converted statement not only violates a well-established rule of deductive logic, it is also a very different empirical claim whose truth must be independently supported by the evidence.

EXAMPLE “If one is a Christian, then he or she loves and cares for other people. Therefore, if you love and care for other people, you must be a Christian, whether you call yourself one or not.” A number of counterexamples are available here, for there are many people who love and care for other people who are not a part of the Christian or any other religious tradition.

ATTACKING THE FALLACY An absurd counterexample should convince your opponent that the false conversion of a universal affirmative statement is logically flawed. From the statement “all apples are fruits,” no opponent is likely to want to claim the truth of the converse that “all fruits are apples.” To attack the false conversion of a conditional statement, you might try the following absurd example to demonstrate its faulty character: “If someone is the president of the United States, that person is at least thirty-five years old and a natural-born U.S. citizen;

yet obviously, if one is at least thirty-five years old and a natural-born U.S. citizen, one is not necessarily the president of the United States.”

UNDISTRIBUTED MIDDLE TERM

DEFINITION *Drawing a conclusion in a syllogism in which the middle term in the premises is not distributed at least once.*

In order to understand and recognize this and the following common deductive fallacy, you will need to know several things about syllogistic reasoning: the structure of a syllogism, the four types of statements used in syllogisms, the nature of distribution, and the two main rules of syllogistic reasoning.

First, a *syllogism* is an argument constituted by three statements, two of which are premises and one of which is a conclusion. It has three and only three terms, each of which appears two and only two times in the argument as either the subject or predicate in a statement. One of the terms, the *middle term*, appears in both the premises and makes a connection between them, but it does not appear in the conclusion. The other two terms are called *end terms*. One end term appears in one premise, and the other end term appears in the other premise, and they both appear as either the subject or predicate of the conclusion.

Second, four different types of statements are used in syllogistic reasoning. These statements consist of a subject and predicate, and each type of statement has its own name. It is either an A, E, I, or O type of statement:

An A statement is a universal affirmative statement, as in “all X are Y.”

An E statement is a universal negative statement, as in “no X are Y.”

An I statement is a particular affirmative statement, as in “some X are Y.”

An O statement is a particular negative statement, as in “some X are not Y.”

The sign of a universal statement is the word *all* or *no* (or their equivalents). The sign of a particular proposition is the word *some*, which means at least one and fewer than all. The names for the affirmative statements come from the first and second vowels in the Latin word *affirmo* (I affirm), and the names for the negative statements come from the first and second vowels of the Latin word *nego* (I deny).

Third, a subject or predicate term is *distributed* if the statement in which it occurs says something about *every member of the class of things that is designated by that term*. The facts of distribution are as follows: The subject term of a universal statement (A or E) is always distributed, and the predicate term of a negative statement (E or O) is always distributed; all other terms are undistributed. A good way to keep these facts straight is to remember the word “AsEbInOp.” Practice pronouncing it! The rule embedded in this crazy word says that in an A statement, only the subject term (*s*) is distributed; in an E statement, both terms (*b*) are distributed; in an I statement, neither term (*n*) is distributed; and in an O statement, the predicate term (*p*) is distributed.

Fourth, two main rules govern correctly formed syllogisms: First, the middle term must be distributed at least once. Second, an end term that is distributed in the conclusion must also be distributed in one of the premises.

Let us now apply our understanding of the structure of a syllogism, the four types of statements used in syllogisms, the nature of distribution, and the two main rules of syllogistic reasoning to a well-formed syllogism:

Since all professors are competent, (A) (premise)

and no competent people are underpaid, (E) (premise)

Therefore, no professors are underpaid. (E) (conclusion)

Another way to standardize this syllogism would be to translate all of its terms into symbols. The symbol for the middle and end terms would usually be the first letter of the subject or predicate term in the statement. In the syllogism above, the term *professors* would be symbolized by the letter *P*, *competent people* by the letter *C*, and *underpaid people* by the letter *U*. Between the subject and predicate of each statement, we will indicate what kind of statement it is by using the traditional designations of A, E, I, and O. If we used this system of symbols for the argument above, it would look like this:

P (A) C (premise)

C (E) U (premise)

P (E) U (conclusion)

If we translate the terms of a syllogism into these symbols, it is much easier to determine whether it violates any of the rules of a valid deductive argument. The middle term of this syllogism is *competent people*, since it appears twice in the premises and not in the conclusion; and the end terms are *professors* and *underpaid people*, each appearing once in the premises and once in the conclusion. The first premise is an A statement, as in “all *X* are *Y*,” and therefore the subject term is distributed. Remember AsEbInOp! The second premise is an E statement, as in “no *X* are *Y*,” and therefore both the subject and predicate are distributed. The conclusion is also an E statement, so both the subject and predicate are distributed. The argument is a structurally sound or valid argument because it satisfies both of the rules of the valid syllogism. It satisfies the first rule, since the middle term, *competent people*, is distributed at least once in the premises. The middle term is not distributed in the first premise, since it appears there as a predicate, and in an A statement only the subject is distributed. It *is* distributed, however, in the second premise, since both the subject and predicate are distributed in an E statement. It also satisfies the second rule of a valid syllogism. Both of the end terms are distributed in the conclusion, because both the subject and predicate terms are distributed in an E statement; but they are also distributed in the premises, as *professors* appears as the subject of an A statement in the first premise, and *underpaid people* appears in the second premise as the predicate of an E statement.

The fallacy of the undistributed middle term is committed when an arguer derives a conclusion in a syllogistic argument in which the middle term is distributed in neither of its appearances in the premises. This is a fatal flaw in the structure of a

syllogism, and no conclusion should be drawn from premises in which the middle term is not distributed at least once.

EXAMPLE “Since some philosophers are poor discussion leaders (I), and some of our professors here are philosophers (I), we know that at least some of our professors are not very good at leading discussions (I).” For the purpose of clarification, in each of the examples in this section and the following one, I have identified each of the statements in the argument as either an A, E, I, or O statement. Let us now reconstruct this argument into standard form:

Since some philosophers are poor discussion leaders, (I) (premise)
 and some of our professors are philosophers, (I) (premise)
 Therefore, some of our professors are poor discussion leaders. (I) (conclusion)

Translating the argument into symbols exposes the following formal structure:

PH (I) PDL (premise)
 PR (I) PH (premise)
 PR (I) PDL (conclusion)

The middle term *philosophers* (PH) is the subject of an I statement in the first premise and the predicate of an I statement in the second premise, which means that it is distributed in neither premise, since, according to AsEbInOp, an I statement distributes neither of its terms. But one of the rules of a valid syllogism says that a middle term must be distributed at least once. Hence, the argument commits the fallacy of an undistributed middle term. Even without reference to the rule, it is clear that no claim is made about *all* philosophers. We therefore have no way of knowing whether any of the “some philosophers” referred to in the first premise are included in the class of “some of our professors” in the second premise or the conclusion, and therefore it *cannot* be inferred that any of our professors are poor discussion leaders.

EXAMPLE “Democrats care about helping the least advantaged in society (A). Jesus always cared about helping the least advantaged, too (A). Jesus, no doubt, would have been a Democrat (A).”

D (A) CLA
J (A) CLA
 J (A) D

The middle term, *care about helping the least advantaged* (CLA), appears in the predicate position of two A statements and is therefore not distributed in either, and according to the rules of a valid syllogism, the middle term must be distributed at least once. It should also be clear that no claim is made about *all* people who care about the least advantaged in society. Therefore, there is no way of knowing whether any of the people who care about the least advantaged who call themselves Democrats are included in the class of those who care about the least disadvantaged who are identified as Jesus. Therefore, it is a structurally flawed argument, and it cannot be inferred that Jesus would have been a Democrat.

EXAMPLE “Supporters of the Ku Klux Klan are against gun control (A), and Republicans are also against gun control (A), so some Republicans must be supporters of the Klan (I).”

SK (A) PAG

R (A) PAG

R (I) SK

The conclusion that “some Republicans are supporters of the Klan” cannot be drawn from the premises in this argument. In fact, no claim could be drawn because it is a structurally flawed argument. The middle term, *people against gun control* (PAG), is not distributed, since it is the predicate of an A statement. In the absence of a claim made about all the members of the class of people against gun control, there is no way to connect the end terms in the conclusion. In other words, there is no way of knowing whether any of the people against gun control who are Klan members are included in the class of people against gun control who are in the class of Republicans.

ATTACKING THE FALLACY Many of the arguers who commit the fallacy of the undistributed middle term will be unacquainted with either the notion of distribution or the rules of a valid syllogism. Therefore, it may not be very effective simply to point out that they have failed to distribute the middle term. However, unless *you* are acquainted with these matters, you may be less than certain that a fallacy has actually been committed. Even though the absurd counterexample method is a very effective method of demonstrating the fallaciousness of such an argument, an understanding of the mechanics of syllogistic reasoning will surely facilitate a wiser and more confident use of that method. You would then be in a better position to confront your opponent with an example of a syllogism that has true premises and an obviously false conclusion but that follows the same pattern of flawed reasoning exhibited in his or her argument. Try this one: “Professors read books. Children read books. Therefore, professors are children.”

ILLCIT DISTRIBUTION OF AN END TERM

DEFINITION *Drawing a conclusion in a syllogism in which a distributed end term in the conclusion is not distributed in the premises.*

The second rule governing syllogistic reasoning says that if a term in the conclusion of an argument is distributed, it must also be distributed when it appears in one of the premises. In other words, the “evidence” or premises that support that claim must also make a claim about every member of the class designated by that end term. If an argument fails to do this, it must be regarded as structurally flawed.

EXAMPLE “Those who ignore the relevant facts in a situation are likely to come to a false judgment (A), and since no jury in a criminal trial ignores the relevant facts

(E), no jury in a criminal trial is likely to come to a false judgment (E).” If we re-construct this argument into standard form, it looks like this:

Since all those who ignore the relevant facts in a situation are people who are likely to come to a false judgment, (A) (premise)
 and no members of the jury are people who ignore the relevant facts in a situation, (E) (premise)
 Therefore, members of the jury are people who are likely to come to a false judgment. (E) (conclusion)

A symbolic representation of this argument reveals its formal structure:

$$\begin{array}{l} \text{IRF (A) CFJ} \\ \text{JM (E) IRF} \\ \hline \text{JM (E) CFJ} \end{array}$$

The fallacy in this example is that one of the end terms, *people who are likely to come to a false judgment* (CFJ), is distributed in the conclusion, because both terms are distributed in an E statement. But that term is not distributed in the premises and therefore violates the second rule of a valid syllogism. This term appears in the first premise as the predicate of an A statement, which does not distribute its predicate term. It could also be pointed out that a number of reasons other than ignoring the facts could cause jury members to come to a false judgment.

EXAMPLE “Everything that is morally right is just (A), but some actions that bring about the greatest good for the greatest number are not just (O). Therefore, we would have to conclude that some morally right actions are not actions that would bring about the greatest good for the greatest number of people (O).”

$$\begin{array}{l} \text{MR (A) J} \\ \text{BGG (O) J} \\ \hline \text{MR (O) BGG} \end{array}$$

The end term, *actions that would bring about the greatest good for the greatest number of people* (BGG), is distributed in the conclusion, because it is the predicate of an O statement. But it is not distributed in the second premise, because it is the subject of an O statement. This is a violation of the second rule of a valid syllogism. Therefore, it cannot be concluded that “some morally right actions are not actions that would bring about the greatest good for the greatest number of people.”

EXAMPLE “Newly constructed homes are very expensive (A). Nevertheless, new homes are very energy efficient (A). So, an energy-efficient home is going to be expensive (A).” Not necessarily.

$$\begin{array}{l} \text{NC (A) EX} \\ \text{NC (A) EE} \\ \hline \text{EE (A) EX} \end{array}$$

The end term *energy-efficient homes* (EE) makes a claim about all energy-efficient homes in the conclusion but not in the second premise, where it is the predicate term of an A statement. Since the argument is structurally flawed, it cannot be concluded that energy-efficient homes are expensive.

ATTACKING THE FALLACY You may attack the fallacy of illicit distribution of an end term by simply citing the rule that a term cannot be distributed in the conclusion if it is not distributed in one of the premises. Or you could simply point out that a conclusion has been drawn about all members of a class of things that is based on a premise that makes a claim about only *some* members of that class. You can, of course, always use a counterexample of an argument with true premises and an obviously false conclusion that uses the same pattern of reasoning that is found in the flawed argument. The following absurd argument has the same structure as the first example in this section about criminal juries: “Since all fathers have children (A), and no mothers are fathers, (E) therefore, no mothers have children (E).”

ASSIGNMENTS

C. Fallacies of Deductive Inference For each of the following arguments, (1) identify the of fallacy of deductive inference illustrated, and (2) explain how the reasoning violates the structural criterion. There are two examples of each of the fallacies discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

1. If Picasso’s “Guernica” has artistic merit, then it would be appreciated by most people, and it is. Hence, I think we can conclude that it has artistic merit.
2. We know that the earth is spherically shaped because spheres always cast curved shadows and we have found that the earth casts a curved shadow on the moon during a lunar eclipse.
3. Since none of our better teachers are tenured, and our tenured faculty members are all very politically conservative, we at least know that none of our better teachers are conservative.
- *4. People who obey the law will stay out of trouble with the police. Therefore, it could be concluded that those who have managed to stay out of trouble with the police are those who don’t go around breaking the law.
5. If Congress had strong, vigorous leadership, it would be able to override the president’s veto on this stem cell research bill. However, because the congressional leadership has not exhibited any strength whatsoever, Congress will not be able to override the president’s veto.
- *6. Since most morally justified acts are nonviolent and most acts of civil disobedience are nonviolent, there are at least some acts of civil disobedience that are morally justified.
- *7. **SHERRY:** If my mother saw me go into this X-rated movie, I’d really be embarrassed.
SARAH: Well, obviously your mother is *not* going to see you. You told me that she was out of town for the weekend, so there’s no way you’re going to be embarrassed by going to this movie.
8. If a person is given a proper upbringing by one’s parents, he or she will treat others with respect. So if a person treats others with respect, we must conclude that he or she has indeed been given a proper upbringing.

- *9. Esther told me that if she failed Philosophy 101, she would drop out of school. As she has left school, I assume that she failed the course.
- *10. Those who are really interested in acquiring the ability to reason correctly will be serious about the study of logic. Those who are serious about studying logic will read this book. Therefore, the people who read this book are people who are genuinely interested in learning about the proper way to reason.

D. For each of the following arguments (1) identify, from among all the fallacies studied in this chapter, the fallacy illustrated, and (2) explain how the reasoning violates the structural criterion. There are two examples of each fallacy discussed in this chapter.

1. You're not going to vote for a person who would give an interview to a magazine like *Penthouse*, are you?
2. Yes, Ms. Smith, if I had used the money contributed to my special campaign fund for personal purposes, it *would* have been immoral, but I did not use a penny of it for personal purposes. Therefore, there was nothing wrong about having such a fund.
3. A server to a restaurant patron: "What will you be having for dessert?"
4. Since presidents have the right to use executive privilege as a reason for withholding information, and no cabinet officer is the president, no cabinet officer can use executive privilege as a reason for withholding information from the special prosecutor.
5. If he planned on shooting him, he would have to have a gun, and he did own a gun, so he must have killed him.
6. Since all biology professors have an advanced degree, my advanced degree in biology qualifies me to teach in your biology department.
7. I think that lying to other people destroys trust and poisons healthy relationships. I've seen it happen over and over with parents who do not deal honestly with their children when the children are growing up. That's why it is important never to lie to your children, except, of course, about things like Santa Claus and stuff. Sometimes children are just too young to understand the truth, so for their own good, you fudge the truth a little.
8. Legal measures that would put some controls on corporate monopolies are clearly in the public interest, because the good of the community would be decidedly improved if we could find some legal way of preventing the total control of the production and distribution of a particular service or product by a single corporation.
9. **ANGELA:** As an American, I can do anything I want. Freedom is what our ancestors fought and died for. Nobody can tell me what to do and what not to do.
MEIGHAN: But there are laws, Angela. Don't you have to obey the speed limit and not take money that doesn't belong to you?
ANGELA: Well, of course, you have to obey the laws, but the government still can't tell me what to do.
10. All eighteen-year-olds are eligible to vote. Of course, some people who are eligible to vote do not exercise their right. Hence, there must be some eighteen-year-olds who do not exercise their rights.
11. **DAWN:** If a man really loves a woman, he won't let her work outside the home.

ELEANOR: But doesn't your daughter teach school? And her husband surely loves her.

DAWN: Oh, he acts like he loves her, but I'm not so sure about that. If he really loved her, he would insist on being the sole provider.

12. I just discovered on the Internet last week that if a cat licks antifreeze, the cat will die. I left my cat out last night and found her dead in the garage this morning. Somehow, she must have gotten into the antifreeze from my car. Perhaps the radiator was so hot when I came home last night, it spilled over or something.
13. **CLIENT TO STOCKBROKER:** When are you going to pay me back that \$5,000 I gave you that you lost in the stock market?
14. Since some unhappy people commit suicide, and some rich people kill themselves, then it must be the case that for some people, having lots of money doesn't make them happy.
15. **DIRK:** I've been a Baptist all my life, and I believe that the Bible is literally true.
GREG: But there are a number of contradictions in the Bible, such as the two very different creation accounts in Genesis, and there are discrepancies in a number of other stories and events recorded in the Bible.
DIRK: Just because there are discrepancies in the recording of the accounts of the events doesn't mean that it isn't literally true.
16. If well-adjusted people do not commit suicide, then those who do not do themselves in are well adjusted.
17. **PROFESSOR WITHERS:** Unless someone wishes to add anything further to the discussion of this absurd issue, I suggest that we move on to the next topic.
18. Scott must not be home; he said that if the light was on when we came by, we could be assured that he was home, and the light isn't on.
19. I think that capital punishment for murderers and rapists is quite justified; there are a number of good reasons for putting to death people who commit such crimes.
20. Most of the supporters of a higher minimum wage are Democrats, but none of the food producers in this country support that proposal, so you can be sure that none of them are Democrats.
21. Something cannot be created out of nothing. At least we are not aware of any such phenomenon. In other words, whatever exists must be created out of something else. But we know that before the universe existed, there was nothing. Therefore, God must have created it.
22. **PROFESSOR LETSON:** All philosophical questions are solvable.
KEIKO: But what about the problem of beauty? We haven't solved that problem.
PROFESSOR LETSON: That's not a philosophical problem.
KEIKO: Why isn't it a philosophical question?
PROFESSOR LETSON: Because philosophical questions are solvable and that one isn't.

E. Submit an argument that you have read or heard within the past week that defends a position on a current controversial social, political, moral, religious, or aesthetic issue. Photocopy or retype the argument from its source and tape it on a

separate page from your typewritten analysis of it. In your analysis, reconstruct the argument into standard form and then evaluate it in terms of the five criteria of a good argument. Point out any *named* fallacies that violate the structural criterion. Then construct, with the help of the guidelines for “Making Arguments Stronger” in Chapter III, a stronger argument with the same conclusion.

F. Use a 3-by-5 card to submit an *original* example (found or created) of each of the fallacies that violates the structural criterion and then create your own strategies for attacking the reasoning.

G. At the end of the last chapter you were asked to read the first of five emails written by “Dad” to his son Jim in college. These emails are included in order in this and each of the next four chapters. In this first email, Dad commits each of the eleven fallacies discussed in this chapter. Each of the fallacies is committed only one time, and each number represents the presence of a named fallacy immediately preceding it. Identify by name each of the fallacies committed.

Dear Jim,

I hope classes are going well for you, son—especially your philosophy class, which brings me to the reason I’m writing this email. When you were home last week for Thanksgiving break, your mother and I noticed that you seemed to be acting a bit strange, especially during and after the Thanksgiving church service. It occurs to us that maybe your philosophy class is causing you to question your faith.

Since I also took a philosophy course in college, I know that many philosophers push the idea that faith, like everything else, should be defensible by reason. For the record, I believe that my faith is *certainly* reasonable, but when reason leads me to some view that is inconsistent with my faith, then reason is just wrong. (1) Real faith is something that doesn’t need to be supported by reason, and mine is a real faith. (2)

Jim, any ten-year-old knows that you can’t prove the existence of God. (3) Yet most philosophers continue to dwell on that question, even though they always fail. Although most philosophers question the existence of God, no person of faith questions the existence of God, so there is no way that philosophers could be people of faith. (4) That is pretty clear. Since both atheists and philosophers question the existence of God, it’s reasonable to conclude that philosophers really are atheists, whether they admit it or not. (5) It’s simply a matter of logic.

Just in case there’s any doubt about what we are dealing with here, let me remind you that atheists are those who deny there is a God who plays any role in determining right or wrong. Therefore, if your professor denies that, he or she is clearly an atheist. (6) That’s why it’s so important to have a strong faith in God. If God doesn’t exist, there’s no basis for morality. God determines for us what is right or wrong. The philosophers will try to prove otherwise by trotting out that Abraham-Isaac story about how Abraham was willing to abandon his own sense of morality to do what God told him to do. They think that the story shows God endorsing the killing of an innocent person and therefore illustrates their point about the absurdity of the view that an act is right because God says it is. But you and I know that God wouldn’t let Abraham do something that was *wrong*. (7)

Look at this way, Jim. If God exists, he would have revealed himself in various ways to his creatures. And He has indeed revealed himself by his miraculous acts and through the personal religious experiences of believers throughout history. It follows that God must therefore exist. (8) If numerous miracles had not occurred and thou-

sands of people had not had personal religious experiences, then maybe even I might have some reason to question God's existence, but those things have happened, so there is no question that he exists. (9)

Perhaps this all boils down to a very simple question, and I hesitate to put it like this, but your mother and I are very concerned about you. You just have to ask yourself: Do you really want to risk God's eternal punishment? (10) We know that God is a loving God, but he is also a demanding God; and the Bible makes it very clear that if you don't hold to a belief in his existence, He *will* punish you eternally. (11) I know that this isn't a pleasant subject. I just felt that I needed to address it. Email me back soon.

Love,
Dad

H. Assume the role of Jim and write an email to Dad that responds to or attacks his poor reasoning in one of the paragraphs in the email above. Try to attack each fallacy committed without using the actual *name* of the fallacy. Use the skills you have learned from the "Attacking the Fallacy" sections throughout this chapter to make your point without being disrespectful or insensitive. After all, he *is* your dad!

FALLACIES THAT VIOLATE THE RELEVANCE CRITERION

This chapter should help you to:

Define or describe in your own words the essential features of each of the named fallacies that violate the relevance criterion of a good argument.

Recognize, name, and explain the faulty pattern of reasoning in each of these fallacies when you encounter it in ordinary discourse or discussion.

Make use of effective strategies for attacking or helping others to correct their faulty reasoning when they commit any of these fallacies.

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.

The patterns of faulty reasoning discussed in this chapter are fallacies that violate the relevance criterion of a good argument, in that they employ premises that are irrelevant or make appeals to factors that are irrelevant to the truth or merit of their conclusions. A premise or appeal is *relevant* if its acceptance provides some reason to believe, counts in favor of, or has some bearing on the merit of the conclusion. A premise or appeal is *irrelevant* if its acceptance has no bearing on, provides no evidence for, or has no connection to the merit of the conclusion.

These fallacies are divided into two basic categories: (1) fallacies of irrelevant premise and (2) fallacies of irrelevant appeal. Arguments with irrelevant premises are often called *non sequiturs*, which means that the conclusion does not follow from the premises. They are also sometimes called *argumentative leaps*, which suggests that since no connection can be found between the premises and the conclusion, a huge leap would be required to move from one to the other. Arguments that

use an irrelevant appeal try to support a conclusion by appealing to a factor or consideration that only appears to have a bearing on the merit of the conclusion.

FALLACIES OF IRRELEVANT PREMISE

The fallacies of irrelevant premise are those arguments that use premises that have no connection to or fail to give support to their conclusions. One way to commit such a fallacy is to evaluate a thing in terms of its earlier context, ignoring changes that may have altered its character. Some arguers use premises to try to justify their position that sound plausible but are not the real reasons supporting their conclusions because they wish to conceal the real reasons for their ideas or actions. Finally, some arguers set forth reasons to try to lead us to a point of view, but then draw a conclusion other than the one that the reasons actually support. Or they do the opposite and first make a claim and then produce reasons other than the reasons that would support the claim in question. In all of these cases, the premises are irrelevant to the conclusion.

GENETIC FALLACY

DEFINITION Evaluating a thing in terms of its earlier context and then carrying over that evaluation to the thing in the present, while ignoring relevant changes that may have altered its character in the interim.

Those who use the genetic fallacy attempt to reduce the significance of an idea, person, practice, or institution merely to an account of its origin or genesis, thereby overlooking the development, regression, or difference to be found in it in the present situation. One who commits this fallacy typically transfers the positive or negative esteem that he or she has for the thing in its original context or earlier form to the thing in its present form. The genetic fallacy is sometimes committed by religious leaders and others who forbid certain practices on the basis of their supposed origins. Some religious groups, for example, have argued that their members should not dance because dancing was originally used in pagan mystery cults as a way of worshiping pagan gods. Even if this were the way dancing originated and if pagans used to carry on in this way, it is doubtful that that fact would have any relevance to the merit of attending one's high school prom today.

The genetic fallacy thus exhibits a pattern of reasoning that fails to meet the relevance criterion of a good argument—that the premises must have a bearing on the truth or value of the claim in question. Since a premise about the merit of a thing in its original context rarely has any relevance to a claim about it in its present context, an argument that uses such a premise as a basis for accepting or rejecting a claim is usually flawed.

EXAMPLE “I wouldn't vote for Don Reichard for anything. You see, I grew up with him. We went to grade school together. He was just one big 'goof-off.' You couldn't depend on him for anything. I shudder to think of his being governor of any state in which I live.”

The arguer here is assuming that Reichard is the same kind of person now that he was when he was in grade school. The speaker overlooks the possibility

that he may have matured or changed into quite a different person than he was then.

EXAMPLE “You’re not going to wear a wedding ring, are you? Don’t you know that the wedding ring originally symbolized the ankle chains women wore to prevent them from running away from their husbands? I wouldn’t have thought you would be a party to such a sexist practice.”

There may be reasons why people may not wish to wear wedding rings, but it would be logically inappropriate for a couple to reject the notion of exchanging wedding rings on the sole grounds of its alleged sexist origins. The argument in standard form might look like this:

Since wedding rings were originally symbols of ankle chains that husbands placed upon their wives, (premise)

[and the symbol means the same thing now as it did then,] (implicit premise)

and such actions would constitute a sexist practice, (premise)

Therefore, one who follows this practice now is engaging in a sexist practice. (conclusion)

Since the second implicit premise is clearly false or unacceptable, the first premise must be declared as irrelevant. This is so because how things were or what they meant in their origins is not relevant to how they should be assessed in the present, if those things have changed and are no longer like their origin. Since the third premise is tied to the first, none of the premises of the argument are relevant, so the conclusion does not follow.

EXAMPLE “Yes, I have heard that Dr. Zarzar is a very good gynecologist, but if I were a woman, I wouldn’t go to him. I went to high school with him, and he was always looking at porn.” The arguer here is using his past negative assessment of the doctor during his adolescent life, as the grounds for a present assessment of him.

ATTACKING THE FALLACY Getting an arguer to disregard the origin or original context of an idea or thing is not easy. Strong emotional responses connected to those origins are particularly difficult to dismiss. Consider, for example, how difficult it is to evaluate objectively the attractiveness of a mate’s house décor or clothing that was selected by a former lover. Where a thing comes from tends to have a rather potent effect on the way we evaluate it. Nevertheless, it is important to try to dismiss such factors in our deliberations about their worth. When an opponent uses such considerations, it would be appropriate to ask what there is about the thing in the present that he or she finds either objectionable or worthwhile.

To demonstrate the appropriateness of separating the worth of a thing from how it started, consider an emotional issue such as one’s longtime relationship to a mate. Ask the arguer whether he or she would feel any differently about his or her mate if it were just discovered that their first meeting or “date” was part of an elaborate practical joke or, even worse, a case of mistaken identity. Such an undesirable beginning surely would be regarded as irrelevant to the assessment of the

present worth of the relationship. If the arguer can make that kind of separation in this case, he or she should be able to do it with regard to other matters.

If you need an absurd counterexample to convince another of the irrelevance of origins, try this: “You say that John is a great chef, but I remember how as a kid, he used to make pies out of mud. I’m not about to eat any food he prepares. There’s no telling what might be in it.” No person would consider John’s mud-pie past as relevant to his present cooking skill, but the form of the argument is no different from many other arguments that some people unfortunately seem to find convincing.

RATIONALIZATION

DEFINITION *Using plausible-sounding but usually fake reasons to justify a particular position that is held on other, less respectable grounds.*

Rationalization is properly described as a violation of the relevance criterion of a good argument because the argument’s fake premises are not relevant to the conclusion. The stated premises have little or no relationship to the conclusion since they are not the real reasons for the conclusion drawn. Out of embarrassment, fear, or some other unknown reason, the real reasons are concealed.

Rationalization, then, is a kind of dishonest substitute for good reasoning. In good arguments, the belief or conclusion follows from the evidence. In rationalization, the “evidence” comes after the belief has already been determined. The rationalizer is simply using premises that make his or her questionable position or action appear to be rationally respectable.

Some instances of this fallacy could be construed as also violating the acceptability criterion of a good argument. Since the premises are simply “made up” for the purpose of defending an action or propping up a belief arrived at on other grounds, they are not likely to be true or acceptable ones, which is another reason why they do not support the conclusion.

EXAMPLE Xavier, a senior philosophy major at a small college, says to Professor Jones: “I didn’t do well on the Law School Admissions Test. You see, I just don’t do very well on tests. Tests just don’t show my real ability. Besides, the day before I took the LSAT, I had some really bad news from home. I’ll do better next time.”

Xavier is probably rationalizing. He is trying to give plausible-sounding reasons for his weak performance on the LSAT, but the reasons sound hollow. They cannot bear the weight that he places on them. He wishes not only to cover his embarrassment but also to offset the effect of his poor LSAT score on Professor Jones’s image of him. Xavier’s argument in standard form looks like this:

Since I do not perform well on tests, (premise)
 and tests do not demonstrate my real ability or grasp of the material, (premise)
 and I received disturbing news the day before the test, (premise)
 Therefore, I cannot have been expected to have performed well on the Law School Admissions Test. (conclusion)

If Xavier is a senior philosophy major, he has probably taken many tests and performed decently on them, or he would never have made it to the senior level. If for some reason he really does not do well on tests, that fact would probably already be known to Professor Jones and he would not need to be reminded of it.

An experienced professor would also probably discount the “I had bad news from home” reason for a poor performance and see it for what it probably is—a backup argument in case the “I do not do well on tests” reason does not work. Indeed, the dragging in of the backup argument is a very good clue to the fact that a rationalization is in progress. If this analysis seems harsh or insensitive, it must be remembered that when dealing with what appears to be a rationalization, some such analysis must be done in order to get beyond the fake reasons and to try to address the real reasons for the poor performance. The real reason may be that some parts of the LSAT are simply very difficult, and in order to do better on those parts the next time around, Xavier would need to focus on developing the skills required for being successful on those parts of the test. However, as long as he insists on giving fake reasons for the poor performance, not only does it not adequately help others to understand the results, it might even prevent him from improving on them.

EXAMPLE After losing a boyfriend to another young woman, Sofia says: “Well, I was going to dump him anyway. It was really getting boring having him around. I should have left him long ago; I just felt sorry for him.”

Sofia is trying to deal with the fact that the relationship with her boyfriend is over. To make that break more personally palatable, she finds fake reasons to justify it to herself and to anyone who cares to listen.

EXAMPLE “I suppose I really should have gone to my cousin’s wedding, but we have never really been close. And I only met the bride one time. She probably wouldn’t even remember me. Besides, I really didn’t know what to buy them for a wedding gift. From what I hear, they have everything a couple would need. Anyway, there were so many people there, they surely didn’t miss me.”

This bit of rationalization is familiar to most of us. The real reasons for not going to the wedding were probably less admirable. This person perhaps didn’t want to spend the money for the gift, didn’t want to get dressed up, or simply preferred to watch a ball game. The stated reasons, then, had little or no relevance to or connection with the decision made.

ATTACKING THE FALLACY Let your rationalizing opponent know that you have reason to believe that you have not heard the real argument. You may ask for the arguer to give you the *real* reasons for the action or belief, but since the rationalizer is probably engaging in a bit of face-saving behavior—the very reason for the rationalization—it is not likely that you will get a straight story. The rationalizer has a vested interest to protect, and revealing the actual reasons would jeopardize that interest. Therefore, you will probably have to concentrate your attack on the *stated* argument, as we did with Xavier’s argument about the LSAT.

You might also ask whether the arguer would still hold to the belief or defend the action if the stated premises turned out to be false or irrelevant. If the arguer

answers “yes,” he or she is actually confessing that the premises are not relevant to the conclusion drawn and the argument is therefore a faulty one. If the arguer answers “no,” you might try to find some way of demonstrating that the premises are indeed false or irrelevant in order to call what you think is the rationalizer’s bluff. If the attack is successful, the best result would be for the arguer to either abandon the belief or alter the action.

Since rationalization could be justifiably construed as an act of deliberate dishonesty, the rationalizer perhaps deserves to suffer moral embarrassment at being caught giving fake and therefore irrelevant reasons for holding a belief or engaging in a particular action. However, since our main purpose is to evaluate the quality of the real argument, we ought to focus all our efforts on finding the *real* reasons rather than on exposing the arguer’s dishonesty.

DRAWING THE WRONG CONCLUSION

DEFINITION Drawing a conclusion other than the one supported by the evidence presented in the argument.

The fallacy of drawing the wrong conclusion is often referred to as the fallacy of *missing the point*, as in “missing the point of the evidence.” The argument’s conclusion misses the main thrust of the evidence provided. Although a well-developed evidential case for a particular conclusion is presented, the arguer simply draws the wrong conclusion from the premises provided. Even though the conclusion purports to follow from the evidence, the evidence presented actually supports some other, although perhaps related, conclusion. However, since the evidence has little or no bearing on the truth or merit of the stated conclusion, the argument violates the relevance criterion of a good argument.

In some cases, reasoning in a way that draws the wrong conclusion or misses the point of the evidence may be deliberate. An example is the prosecutor who is allegedly supporting the claim that a defendant is guilty of rape, but who presents “evidence” that supports another conclusion, namely, that the rape was a heinous crime. The prosecutor hopes, of course, that the jury will infer the stated conclusion (“the defendant is guilty of this rape”) rather than the unstated one (“the rape was a heinous crime”), which is the one actually supported by the evidence presented. But the jury should not do so. If the jury accepts the “guilty” conclusion, it too will be drawing the wrong conclusion from the evidence.

In some cases, the wrong conclusion might be drawn because of carelessness in the formation of the argument, but in most cases it is drawn because of the subtle, perhaps even unconscious, prejudices of the arguer. The arguer may want the conclusion to be true so much that he or she draws that conclusion, even though it is not the conclusion supported by the evidence presented. For example, if the arguer is generally concerned about society’s unfair treatment of women, all the evidence of sexist behavior in society might be brought forth in support of a plea for a particular piece of equal rights legislation. Even though that evidence may support a claim that ours is a sexist culture, it would not necessarily support the claim that a particular piece of equal rights legislation should be enacted.

EXAMPLE At the time of the Supreme Court decision concerning the Texas sodomy case, President George W. Bush held a press conference and was asked about the court action. He indicated what appeared to be support for the position of the court, that consenting adult citizens, whether heterosexual or homosexual, have a right to privacy with regard to their sexual behavior. When asked about gay marriage, however, he said that he believed in the sanctity of marriage, and therefore he believed that marriage should be between a man and a woman. If the president's remarks can be construed as an argument, it would look like this in standard form:

Since I believe in the sanctity of marriage, (premise)

Therefore, I believe that marriage should be between a man and a woman.
(conclusion)

In the president's argument, the move to the conclusion is a jarring argumentative leap. No reason is given to show the connection between the "sanctity" of marriage and the conclusion that it should take place only between a man and a woman. If the principle of charity suggests that the listener should construe the meaning of "sanctity" as "holy" or "sacred," or even "God-ordained," it is still not clear, without additional premises or further explanation, what the connection is between the claim about the "sacredness" of marriage and the president's conclusion that it should be between a man and a woman. Most of us, of course, are not so naive as to be unaware that he was walking a tightrope with his constituency on this issue. Nevertheless, the president clearly seems to have drawn the wrong conclusion from the evidence given.

EXAMPLE "The present method of evaluating public schoolteachers, which, at best, is an occasional perfunctory check by an administrator, is quite inadequate. If a teacher turns out to be a poor one, there is presently no effective way of getting rid of him or her. Therefore, teachers should be hired for a 'term of service,' after which they would reenter the job market, seeking jobs through the usual screening processes."

There may be good reasons for hiring teachers for terms of service, but that conclusion does not follow from the evidence presented. A more relevant conclusion might be that some method of systematic evaluation should be instituted that would provide a defensible basis for discharging incompetent teachers.

EXAMPLE "Reporters keep the public informed, and we all know that a well-informed public is necessary to bring about any semblance of justice. Besides, reporters keep public officials and others 'honest' by digging out the facts behind their claims and exposing them when they don't tell the truth or when they engage in questionable practices. Therefore, I think that the courts are grossly unfair to newspaper reporters when they force them to go to prison just because they won't reveal the sources of their information."

The weight of evidence in this argument supports the view that newspaper reporters perform a very useful and important service for their readers; however, it does not support the claim that the courts have been unfair to reporters. That particular conclusion is the wrong conclusion to draw from the evidence presented.

ATTACKING THE FALLACY In responding to an arguer's use of this fallacy, it might be helpful to point out what conclusion the evidence *does* support in order to encourage the arguer to change his or her conclusion to the right one. Since the arguer is not likely to agree that his or her conclusion was the wrong one to draw from the evidence, be prepared to be patient in helping him or her to line up the right evidence with the right conclusion. If the arguer is not interested in the "right" conclusion—that is, the one to which the evidence leads—and insists on focusing on the original conclusion, you should make clear that that conclusion requires some very different evidence.

Of course, you can always use an absurd counterexample to make your point. You might try this one: "You and I like the same things, two can live cheaper than one, and we could share a ride to work. Therefore, we should get married."

USING THE WRONG REASONS

DEFINITION *Attempting to support a claim with reasons other than the reasons appropriate to the claim.*

This fallacy may best be described as the reverse of the fallacy of drawing the wrong conclusion. The difference between the fallacy of drawing the wrong conclusion and the fallacy of using the wrong reasons is found by looking at where the emphasis lies in the context of the argument. If the arguer simply misses the point of his or her own evidence, the fallacy of drawing the wrong conclusion has been committed. But if the arguer is attempting to defend a particular conclusion and uses evidence that does not support the conclusion, he or she has committed the fallacy of using the wrong reasons. In the case of drawing the wrong conclusion, the wrong conclusion is usually drawn *after* the presentation of the premises. In the case of using the wrong reasons, the conclusion is uttered *before* the wrong premises are presented. The reason that these two fallacies may sometimes be confused is that once they are put into standard form, they look very much alike. But *before* they are reconstructed, they are clearly distinguishable.

Why would arguers give the wrong reasons for their conclusions? In some instances, they may be simply careless. Because the arguer is already convinced of the truth of the conclusion, almost any evidence that sounds related is regarded as being supportive. Also, sometimes the arguer starts the argument with the conclusion and then simply is unable to find appropriate relevant evidence to support it.

A variation of this fallacy is commonly committed in the arena of political debate, particularly when one is arguing *against* a program or policy. For example, one often hears arguments against a policy or program on the grounds that it does not or would not achieve certain goals. But if these are goals that the program or policy was never designed or expected to achieve, the reasons offered against it are the wrong reasons. The arguer has arbitrarily assigned goals or functions to a program and then criticized it for not achieving those goals. Almost any program, policy, or piece of legislation has limitations that its designers quite readily recognize. Moreover, few programs, when implemented, are such that their most ideal consequences can be or are expected to be fulfilled. Therefore, when ideal results are not achieved, there exists no relevant reason for a negative evaluation of the program. This is especially true if the program may accomplish some other goal or perform

some other important function that might not otherwise be brought about. There may be some good or relevant reasons for opposing a particular program, but those reasons must be relevant to the realistic and/or expected goals and functions of the program. Otherwise, the judgment against it uses the wrong reasons.

EXAMPLE “Certain population groups should not be targeted by tobacco advertising. Tobacco has been shown to cause cancer, it is an expensive habit, and it is offensive to family members, associates, and others who have to put up with the smoker’s smoke.” When reconstructed in standard form, the argument looks like this:

Since tobacco has been shown to cause cancer, (premise)

and tobacco is expensive, (premise)

and secondhand smoke is offensive to others, (premise)

Therefore, specific population groups should not be targeted by tobacco advertising. (conclusion)

In standard form, the argument looks like a case of drawing the wrong conclusion, but it must be remembered that in the *original argument* the arguer started with the conclusion and was clearly attempting to support that conclusion—with the wrong reasons. The reasons given may all be true and good reasons not to smoke; however, they have very little or nothing to do with the issue here. Very different reasons would be required to bring someone to the conclusion that tobacco advertisers should not target specific population groups.

EXAMPLE The following is a conversation between Owen, a philosophy major, and his critic, Lynn:

LYNN: I think that philosophy is a waste of time, Owen. Do you really think that philosophy will ever solve all of our problems?

OWEN: Probably not all of them, but maybe a few.

LYNN: Has it really solved *any* of them? Aren’t philosophers still trying to solve the same problems that Socrates was dealing with more than twenty-four-hundred years ago?

OWEN: Yes, Socrates identified quite a number of problems, but he didn’t solve many of them.

LYNN: Then why are you wasting your time studying a discipline that doesn’t do anything?

What Lynn fails to recognize is that philosophers do not claim that the task of philosophy is to do what she has arbitrarily decided is philosophy’s goal. Nor is there any reason to “stop wasting one’s time” studying it simply because it doesn’t effectively fulfill a critic’s assigned goal for it. Lynn has used the wrong reasons for her conclusion that a major in philosophy is a waste of time.

EXAMPLE Many critics of gun-control legislation have argued that, because gun-control laws will not prevent criminals from using guns in the course of committing crimes, there is no good reason to pass such legislation. But those critics are using the wrong reasons to come to their conclusion against gun-control legislation.

The proponents of gun-control legislation recognize that such legislation will probably have only a limited effect on the control of crime. They know that the serious criminal will not be significantly affected by the restricted sale and registration of guns. Since the legislation is proposed with full awareness of this limitation, it

would not be fair or relevant for a critic to argue against it on those grounds. The legislation, however, could serve other very important functions, such as making guns less readily available as a means for settling domestic quarrels. Moreover, gun control might have the effect of reducing the number of accidental killings. Hence, in spite of its limitations, proponents think that there are very good reasons for passing legislation that would control gun use. An argument *against* gun control that used relevant reasons would be one that showed that the stated functions of the legislation could not be accomplished by enacting it or that some other more important principle was in conflict with the proposal.

ATTACKING THE FALLACY The situation in which many of us encounter the kind of faulty reasoning that uses the wrong reasons is one in which we may tend to agree with the conclusion of an arguer, but not for the reasons he or she gives in the argument. One way to be helpful to the arguer in such a situation is to say something like this: “I find that you have an interesting idea, and it might be a defensible one, but not for the reasons you give.” You might even suggest some reasons that seem more relevant and more supportive of the claim at issue.

One way to prevent a critic from inappropriately assigning irrelevant goals and functions to proposed programs and policies as a basis for a negative evaluation is to make every effort to specify up front the limited goals of the program or policy. It might even be helpful to remind your listener of your awareness of such limitations as often as possible. You thereby might prevent the critic from taking a “cheap shot” at the program. If the critic persists, make it clear that he or she is attacking a misrepresentation of the claim, that is, a claim that no one is making.

ASSIGNMENTS

A. Fallacies of Irrelevant Premise For each of the following arguments, (1) identify the type of fallacy of irrelevant premise illustrated, and (2) explain how the reasoning violates the relevance criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. I think we should hire Karen Cox as the new third-grade teacher. She lives here in the community, she has children in school here, she loves to work with children, and she has been active in the PTA.
- *2. A pregnant bride should not wear white! A white wedding dress symbolizes purity. And you, Debra, hardly qualify!
3. I wasn’t invited, but I wouldn’t have gone anyway. I just don’t care to spend my time with such snobs. Besides, I’ve already been skiing twice this winter.
- *4. Yes, I subscribe to *Playboy*, but I do it for the great articles in there. There was a great piece last month about Iraqi veterans suffering from posttraumatic stress disorder.
- *5. Many people without Ph.D.’s are much better teachers than people with Ph.D.’s. Getting a Ph.D. doesn’t make one a better teacher. Therefore, I don’t think we should hire a person with a Ph.D. to fill this position in our chemistry department.

6. **HENRY:** I've gone off my diet. It just wasn't working.
RICHARD: But I thought it was working really well. Haven't you already lost about twenty pounds?
HENRY: Sure, I've lost weight, but my social life hasn't improved one bit!
7. No, I don't want my boy to join the Boy Scouts. Did you know that the Boy Scouts were organized as a paramilitary organization? They even trained the young boys in accordance with a military scouting manual. The word *scouts* in Boy Scouts literally refers to military scouts. None of my children is going to join such an organization with my blessing.
8. Grades don't really give us much information about a student. If a prospective employer or graduate school were to find from a transcript that a student got a B- in a particular course, very little could be inferred about the particular character or quality of his or her work in that course. Hence, I think that we ought to go to a simple pass-fail system.

FALLACIES OF IRRELEVANT APPEAL

A number of fallacious arguments attempt to support a claim by making questionable appeals to the authority of other people or to emotional factors, none of which are relevant or provide support for the truth or merit of a claim at issue. These appeals to other people attempt to defend a view by either an appeal to an authority who is not really an authority or an appeal to the fact that the view in question is held by a large number of people. The most common of the appeals to emotional factors are appeals to the traditional way of doing things, appeals that threaten or force another into accepting a view, appeals that target the self-interest of others, and appeals that try to manipulate others' strong feelings, attitudes, or prejudices as a means of gaining acceptance for an idea or action.

APPEAL TO IRRELEVANT AUTHORITY

DEFINITION Attempting to support a claim by appealing to the judgment of one who is not an authority in the field, the judgment of an unidentified authority, or the judgment of an authority who is likely to be biased.

An authority in a particular field is one who has access to the knowledge that he or she claims to have, is qualified by training or ability to draw appropriate inferences from that knowledge, and is free from any prejudices or conflicts of interest that would prevent him or her from formulating sound judgments or communicating them honestly.

There is nothing inappropriate about appealing to the judgment of qualified authorities in a field of knowledge as a means of supporting some particular claim related to that field. When the "authority" on whose judgment the argument rests fails to meet the stated criteria, however, the argument should be regarded as fallacious.

The fallacious appeal to authority occurs most frequently in the form of a transfer of an authority's competence in one field to another field in which the authority is *not* competent. An entertainer or athlete, for example, is appealed to as an authority on automobile mufflers or weed-killers; a biologist is called on to support a religious claim; or a politician is treated as an expert on marriage and the family.

Indeed, the judgment of a famous and highly respected person is likely to be indiscriminately invoked on almost any subject.

An unidentified authority is questionable because there is no way for us to determine whether the unnamed authority is in fact qualified. If we do not know who the authority is, we are not in a position to know whether his or her testimony should count in favor of the claim being defended.

Another type of improper authority is a biased one. Some people may be qualified in a particular field by training, ability, and position, yet they are so vitally “interested” in or affected by the issue at stake that there would be good reason to treat their testimony with suspicion.

If an arguer appeals to an unqualified, unidentified, or biased authority to support a particular thesis, then he or she has appealed to a factor that provides no support for the conclusion. When there is contradictory testimony from what appear to be equally qualified and unbiased authorities, the proper response would be to accept the testimony of neither authority, unless you have some independent evidence for accepting the testimony of one and not the other.

EXAMPLE “It’s not true that the government is innocent of any wrongdoing with regard to pollution. I read the other day that government agencies are responsible for more than 50 percent of the country’s water pollution.” This appeal to an irrelevant authority could be reconstructed in the following way:

Since some unidentified source says that the government is responsible for 50 percent of the water pollution in this country, (premise)

[and water pollution is wrong,] (implicit moral premise)

Therefore, the government wrongfully pollutes the country’s water supply.
(conclusion)

It may be true that the U.S. government is responsible for much of our water pollution, but there is no reason to believe such a claim because the source of the claim is as yet unidentified. It should be clear that it is not the arguer’s honesty that is being questioned, just the quality of the arguer’s argument. The first premise is irrelevant because we are not in a position to evaluate the qualifications of the source. Hence, the premise cannot count for or against the truth of the conclusion.

EXAMPLE “I think that we should adopt this new curricular proposal. After all, it has been unanimously endorsed by the college’s governing board. The people who are entrusted with running the college should know what they’re talking about when it comes to deciding the best curriculum for the school.”

In virtually every college or university, the governing board turns over the management of the curriculum to the faculty, who are the experts on such matters. While members of governing boards may be relevant authorities about fiscal or organizational matters, they are not relevant authorities on curricular matters. To use the endorsement of the curriculum by the board as a reason for adopting it is to appeal to an irrelevant authority, which is a violation of the relevance criterion of a good argument.

EXAMPLE “Senator, if you think that the FBI has been engaging in unauthorized or illegal activities, why don’t we ask the director of the bureau and his staff to testify at this hearing so that we can get to the bottom of this matter? Who is in a better position to testify about FBI operations than the director and his division heads?”

The appeal to authority here might be proper in most inquiries concerning FBI operations; yet such testimony might be questionable if the inquiry were intended to evaluate charges of wrongdoing within the bureau that might even involve its director.

ATTACKING THE FALLACY If an argument in support of a claim invokes an unidentified authority, a first step in attacking the argument may be to ask for the authority to be identified. If the arguer is able to do this, then you would be in a position to evaluate that authority by the standard criteria. If the arguer is not able to identify the authority, and especially if the claim at issue is a serious one, you should regard the testimony as having no bearing on the claim.

In determining whether an authority is biased, you should be careful not to disqualify a source too quickly by claiming that he or she is prejudiced. Unfortunately, it is all too common a practice to find or to fabricate some reason why the judgment of almost any authority might be biased. Such a charge should be registered against an authority who is otherwise qualified only when the possibility of bias is clear and might impede the discovery of the truth. If you suspect that an authority may have a conflict of interest, you might point out the presence of that possible conflict, without in any way accusing the authority of either bias or dishonesty. That will at least get the issue out on the table so that it can be directly addressed.

If an argument uses an authority in one field to support a claim in another, you might use an absurd counterexample, such as this: “You wouldn’t use Michael Jordan to support a claim about Hanes underwear, would you?” Unless the arguer thinks that Jordan really *is* an expert on underwear, that should convince him or her about the inappropriateness of his or her own move. If the response is “That’s not the same!” ask the arguer to explain just why it is not the same.

Finally, do not be intimidated when great names are used in support of various claims. William Shakespeare, Abraham Lincoln, John Kennedy, Billy Graham, Martin Luther King Jr., Carl Sagan, Tiger Woods, and many other famous and well-respected people were or are experts, if at all, in very limited ranges of subject matter, and they are not at all qualified to speak authoritatively in most other areas of human concern.

APPEAL TO COMMON OPINION

DEFINITION *Urging the acceptance of a position simply on the grounds that a large number of people accept it or urging the rejection of a position on the grounds that very few people accept it.*

Two other names sometimes given to this fallacy are *bandwagon fallacy* and *consensus gentium*. The bandwagon notion suggests that an idea or action must be true or good because everyone is accepting it or jumping on it as if it were a wagon full of musicians in a circus parade. *Consensus gentium* means “consent of the people.” If a majority or at least a large number of people accept a particular claim, we are often

led to believe that it is true or worthy of our belief also. However, the truth or merit of an idea or claim is in no way affected by the number of people who support it.

Nevertheless, we commonly infer that a film is a good one if there are long lines of people waiting to see it, or we infer that a restaurant serves good food if there are a great number of cars in its parking lot. Remember, however, that crowds are not usually noted for sound judgments and that a number of other factors other than *haute cuisine* could account for the large number of cars.

An argument that supports a conclusion by using the number of people that accept or reject it is using an irrelevant appeal. Such an argument cannot qualify as a good one because the criteria of a good argument require that the factors to which an arguer appeals must have a bearing on the truth or merit of the argument's conclusion.

EXAMPLE "If tanning beds were really unsafe, then millions of Americans would not be using them every week. Neither can the sun be all that harmful to your skin. Virtually everyone I know goes to the beach every year for one primary purpose—the sun. Do you know anyone who goes to the beach and then sits inside the hotel or beach house?"

What large numbers of beach-goers and tanning salon users think is the truth is irrelevant to what is actually the case. Neither should anything be inferred about the issue from what large numbers of tan-seekers actually do. Consider the argument as it is expressed in standard form:

Since millions of Americans use tanning beds every week and go to beaches every year to enjoy the sun's tanning rays, (premise)

and what large numbers of people do must not be harmful, (premise)

Therefore, the use of tanning beds and sunbathing on the beach are activities that are not harmful to the skin. (conclusion)

Once the argument is in standard form, and the second premise is completely naked, it is difficult to believe that anyone would think that the conclusion follows from the premises presented, since we can easily come up with counterexamples to this claim, such as the fact that large numbers of people drive after drinking alcohol. This, of course, is one of the benefits of reconstruction. The mere sight of the clarified argument in standard form may quickly reveal its serious flaw.

EXAMPLE "Marijuana can't be all wrong. According to a recent Gallup survey published in yesterday's *Wall Street Journal*, more than 60 percent of the adult American population sees nothing wrong with it."

The benefits or dangers of smoking marijuana cannot be ascertained by taking a poll. Polls may indicate what people are thinking, doing, or anticipate doing, but very little regarding the merit of an idea, claim, or action can be inferred from such surveys.

EXAMPLE "I'm going to buy the new Prince CD. It's been at the top of the charts for more than a month. It must be a good one."

What large numbers of people do or believe tells us nothing more than what large numbers of people do or believe. It tells nothing about the quality of the thing in question, least of all, the quality of a CD.

ATTACKING THE FALLACY Since this fallacy is so tempting to commit, we perhaps should remind ourselves daily to infer nothing about anything on the basis of what large groups or even the majority of people believe. The weight of public opinion is simply not relevant to the matter of whether a claim is true or deserves our positive response.

You might also remind arguers who use such an appeal that public opinion is quite fickle. To illustrate your point, find a reliable poll that shows a shift in public support from one side of an issue to another within a six-month period. Then you might ask the arguer whether he or she believes that the truth of a claim or the rightness of an action could depend on whether the poll was taken in November or April.

If your opponent is still unconvinced, you could remind him or her about beliefs from both science and history that were at one time held to be true by large numbers of people, yet turned out to be false or vice versa. Probably the best strategy would be to use your opponent's own experience. You might refer, for example, to a claim that the arguer had recently and correctly assessed as false, even in the face of its being believed to be true by a large number of people.

APPEAL TO FORCE OR THREAT

DEFINITION *Attempting to persuade others of a position by threatening them with an undesirable state of affairs instead of presenting evidence for one's view.*

There is nothing wrong with pointing out the consequences of a particular course of action or inaction. In fact, calling attention to those consequences might assist one in appropriately altering his or her behavior. However, if an arguer tries to force another to accept a particular belief or a course of action by threatening him or her with some undesirable action or state of affairs, then the arguer is guilty of using an irrelevant appeal, which is a clear violation of the relevance criterion of a good argument.

One particular form of this fallacy is called *authoritarianism*. Authoritarianism consists in accepting another's authority, not because of that person's skill, knowledge, or expertise in a field but because of his or her power or influence over the one to whom the argument is directed. In such a case, a threat-laden demand for submission to that authority takes the place of relevant evidence on behalf of the truth of a belief or the rightness of an action.

In most cases, the appeal to force is used to lead another not to a particular belief but to a course of action. Suppose that a lobbyist for the American Association of Retired Persons (AARP) asks a congresswoman to vote for a particular piece of legislation, as he reminds her that the AARP represents ten thousand voters in her Florida district. An implicit threat such as this is not relevant to the rightness of the action sought. Even though such an appeal to force may bring about the desired action, it is not because a good argument was presented. The lobbyist's argument could not qualify as a good one, because the threatening premise has no bearing on the merit of the legislation.

EXAMPLE Many of us are aware of cases of sexual harassment in which a graduate school supervisor may demand sexual favors from a graduate student over whom he or she has control in return for continuation in a Ph.D. program. In such cases, the supervisor has not persuaded the victim of the rightness of the action—only that cooperation may be necessary to maintain one’s present status in the program. Hence, the threat may be effective, even though the argument is a bad one. To see clearly how bad it is, let us convert the argument into standard form:

Since I want you to have sex with me, (premise)
 [and I have virtual absolute control over your future professional life,] (implicit premise)
 [and you do not want anything to jeopardize your professional life,] (implicit premise)
 [and I will jeopardize it if you don’t have sex with me,] (implicit premise)
 Therefore, you will have sex with me. (conclusion)

Such an argument would not convince anyone of the rightness of the action sought, but it has probably brought about compliance with the request more often than one might think. In other words, it is a potent device to achieve results, but it is not a good argument because the factors implicitly appealed to are irrelevant.

EXAMPLE The following exchange is another example of authoritarian thinking.

STUDENT: Professor Boltwood, why do we have to attend the guest lecture tonight, as it is outside class time and was not listed on the syllabus?

PROFESSOR BOLTWOOD: Because that is what I require.

The student is asking why the class members are required to attend the extra lecture, but Professor Boltwood responds in an authoritarian fashion. He simply appeals to his power over the students to force their compliance. His argument is fallacious, for it implicitly issues a threat instead of defending the requirement with relevant reasons.

EXAMPLE A local businesswoman reminds the editor of a local newspaper that she spends a lot of advertising dollars in the paper and would prefer that the story concerning her recent arrest for drunk driving not appear in it.

This is clearly an attempt at intimidation. The businesswoman gives no reasons why the story should not appear in the paper other than the implied threat that the newspaper will experience a loss of revenue if it does. A threat is not a relevant reason for doing or not doing something. It may work, but it shouldn’t, for it has no bearing on the merit of the issue at stake.

ATTACKING THE FALLACY It is sometimes difficult to withstand the pressure of a threat, particularly when it comes, as it usually does, from someone with the power to place you in a very vulnerable situation. Indeed, your ability or inclination to reject such an irrelevant appeal may depend on your own sense of personal, economic, and professional security. Nevertheless, one who is guilty of appealing to force or threat should at least be exposed. One way of doing this might be to say

to such a person, “I know what you’re going to do to me if I don’t accept your demand, but are there any good reasons for me to accept it?”

APPEAL TO TRADITION

DEFINITION Attempting to persuade others of a point of view by appealing to their feelings of reverence or respect for a tradition instead of to evidence, especially when a more important principle or issue is at stake.

The comfortable or warm feelings that we may have for a particular traditional way of doing things may be one reason we revere it, but such feelings are not a reason for regarding the tradition as the best way of doing things, especially when a more important principle may be at stake. Emotional attachments to the past are common and pleasant experiences for almost all of us. It is also true that many traditions perform social functions of great importance. Insofar as they embody the distilled wisdom of earlier times, they relieve us of the burden of having to invent our own solutions to the problems created by social interaction.

But there is also a dark and negative side to many traditions. Even though some traditions might originally have had good reasons behind them, those reasons may no longer be relevant considerations. Powerful traditions can perpetuate injustices and preclude the adoption of better ways of doing things. To point out that a particular practice has the status of a tradition therefore sheds no light on whether it is a wise or foolish one. When there is not a more important principle at stake, appeal to tradition is neither a fallacy nor a matter that should concern us. But if holding to a tradition threatens to prevent a solution that enlightened reflection supports, then any positive aspects it may embody must be weighed against the damage that it may inflict. If a tradition has serious negative or harmful features connected with it, then the fact that it is a tradition is beside the point because any argument that attempts to persuade by an appeal to tradition when other important considerations are at issue is making an irrelevant appeal, which is a violation of the relevance criterion of a good argument.

EXAMPLE “I just don’t understand why you and Dan didn’t have your baby circumcised. You can’t just abandon a tradition like that, Amy. Boys have usually been circumcised in our culture, even when they aren’t Jewish. When Daniel is a little older and realizes that he is out of step with the rest of the male world, whatever reason you may have had for not having him circumcised is not really going to matter.” Let us see how this argument looks in standard form:

Since boys in our culture have traditionally been circumcised, (premise)

and an uncircumcised boy will sooner or later feel self-conscious about his body, (premise)

[and we ought to follow tradition, unless it conflicts with something more important,] (implicit moral premise)

[and there is nothing more important at stake,] (implicit premise)

Therefore, parents should have their boys circumcised. (conclusion)

In this argument, the reason given for circumcising non-Jewish boys is that it is a tradition. However, the appeal to tradition is irrelevant in this case because there are several larger issues at stake that should take precedence over a concern for the comfortableness of a tradition. First, the original religious basis of circumcision is no longer a relevant consideration for non-Jewish parents. Second, attempts to defend the practice on the grounds of health are no longer generally supported by health professionals. The comfortableness of tradition would therefore not appear to be strong enough to override the physical pain and financial cost connected with the practice of parents altering the bodies of their male children.

EXAMPLE “But Kristen, our family has always been Southern Baptist. Your grandfather was a Southern Baptist minister, and you have two uncles who are Southern Baptist ministers. Your mother’s family has also always been Southern Baptist. I just don’t understand how you could even think of joining the Methodist church.”

Kristen’s father points out several facts in his appeal to the family tradition. However, the more important ecclesiastical or theological considerations that are at stake in this situation are given no attention at all—only feelings of reverence for a family tradition.

EXAMPLE “When I was in public school, we prayed every day at the beginning of the school session. It was a very meaningful thing for me. I just don’t see why my children can’t have the same kind of experience.”

No counterargument is offered here that considers the more important principle at stake, addressed by the Supreme Court ruling that required prayer in public schools constitutes an “establishment of religion”; the only appeal made is to the comfortableness of a tradition.

EXAMPLE “Virginia Military Institute should never have allowed women to enroll. Ever since Stonewall Jackson, VMI has been an all-male school. My father graduated from there and went on to fight and die in Korea. He would turn over in his grave if he knew that women are now allowed to go to VMI.”

Several issues greater than tradition are at stake here. First, VMI is a tax-supported public college. Second, the school has always discriminated against women in its admissions policy. Third, the courts have said that the school cannot do that. In other words, these political, moral, and judicial considerations clearly take precedence over the feelings of reverence for a tradition, no matter how deeply they are felt.

ATTACKING THE FALLACY Assure your verbal opponent that there is nothing intrinsically wrong with doing things in a traditional way. In fact, you might even admit that you, too, often feel more comfortable with traditional ways of doing things. When nothing else is at stake, following family or cultural traditions should probably be encouraged. However, you should also point out that if a more important principle is in conflict with that tradition, then there is a good reason for changing or discontinuing it. In such cases, a reverence for the past is not a relevant consideration in the process of determining what to do in the present.

APPEAL TO SELF-INTEREST

DEFINITION *Urging an opponent to accept or reject a particular position by appealing solely to his or her personal circumstances or self-interest, when a more important issue is at stake.*

An argument that appeals to the personal circumstances or self-interest of another when there may be more important issues at stake is using an appeal that is not relevant to the merit of the question at issue. What is usually regarded as a more important issue is one that significantly affects other people, one that might have a greater impact on society both now and in the future, or both of these.

Almost all of our daily decisions and actions are legitimately motivated by a consideration of what would be advantageous to our personal life and welfare and the welfare of our family and friends. When self-interest does not conflict with or override consideration of a larger issue, it may be an appropriate consideration. But when larger issues are at stake, an argument that appeals solely to personal circumstances would be a violation of the relevance criterion of a good argument. The effect that a proposed public policy might have on one's personal life should have no bearing on whether it is a good idea. For example, the fact that Senator Hawsey happens to own a second home in Washington, D.C., should not be a consideration in whether or not he votes for or against a tax bill that *disallows* the taking of interest on a second home mortgage as a tax deduction. If the senator thinks that passing such a bill would have good effects on the economy, the general welfare, or both, he should lend his support to it.

It is ironic that some of the same people who appeal to us with arguments based on personal circumstance or motives in order to get us to do something that they want us to do regard it as logically and morally questionable if we accept or reject some *other* proposal solely on the basis of self-interest. It would seem, therefore, that even those who use such appeals are probably aware, in their more reflective moments, that personal circumstances or interests should not be considered relevant when dealing with the merit of broader issues.

EXAMPLE “I really don’t see how you can oppose the administration’s bill to cut income and capital gains taxes. After all, given your tax bracket, you’ll benefit considerably from the cut, and if you sell any of that real estate and those stocks you own, you’re going to realize a lot more from the sale if the capital gains tax is lowered.” Look at this argument in standard form:

Since the administration’s tax bill cuts income and capital gains taxes,
(premise)

and you will benefit from the bill, (premise)

because you have a high income and potential capital gains looming,
(subpremise)

Therefore, you should support the bill. (conclusion)

Although it may indeed be to the advantage of the target of this argument to have lower taxes, there may be a more important issue at stake here. Lowering income and capital gains taxes could have the effect of curtailing other important govern-

ment programs, increasing the national debt, or creating other more serious economic problems for the country. The potential personal benefits may be tempting, but they are not relevant to judging the merit of public policy proposals.

EXAMPLE “Rebecca, I would have thought that you would be actively supporting an affirmative action program here at the college. Because you’re a woman, you of all people should see the merit of using every means available to hire more women to work in areas that have traditionally been dominated by men.”

The special circumstance that Rebecca is a woman is not a relevant or sufficient reason for her to support such a program. Whatever reasons might be given for actively supporting affirmative action, being a woman should not be one of them.

EXAMPLE One faculty member, who supports the foreign language requirement, appeals to the personal interests of another to get her to vote against a proposal to drop the requirement: “Don’t you realize, Professor Macione, that if the faculty votes to drop the foreign language requirement, very few of our students will be likely to take a foreign language? Don’t you agree that without the requirement it will be difficult to get a decent enrollment in your Spanish classes? The requirement helps you to pick up majors and minors. Very few students go to college planning to major or minor in a foreign language.”

The question of whether a foreign language should be required of all students should be determined on the basis of factors relevant to the requirement. The fact that it might provide majors, minors, larger classes, or even a job for Professor Macione is not a relevant consideration.

ATTACKING THE FALLACY If someone appeals to you on a personal level or the level of self-interest, you can head the debate in a more positive direction if you ask for an alternative argument that makes no reference to what may be of personal benefit to you. Let it be known that you are concerned about the truth or rightness of the position at issue, not whether it will benefit you personally. If a good argument for the idea can be formulated, accept its conclusion without embarrassment, even if it *does* benefit you personally.

MANIPULATION OF EMOTIONS

DEFINITION *Attempting to persuade others to accept a position by exploiting their emotions instead of presenting evidence for the position.*

The fallacy is sometimes called *playing to the gallery*. The “gallery” to which this appeal is made refers to the indiscriminating public, which is easily swayed through manipulation of their strong feelings and prejudices. In the absence of a rational argument for a view, this appeal invites an unthinking acceptance of an idea or action on the basis of passion rather than evidence. Manipulating another’s emotions violates the relevance criterion of a good argument, which requires that reasons used to support a conclusion must be relevant to or count in favor of the truth or merit of that conclusion.

There are five types of emotional manipulation that are so common they even have their own names: the appeal to pity, the use of flattery, assigning guilt by association, appeal to group loyalty, and appeal to shame. The irrelevant *appeal to pity* is probably the most common form of emotional manipulation. It consists in attempting to persuade others of a position by appealing to their sympathy instead of to relevant evidence *when a more important principle or issue is at stake*. In such cases, the possibility that someone may be disappointed or suffer some kind of mental anguish because of another's failure to accept or reject a claim as true is an irrelevant consideration.

Even though the introduction of pity into a situation can never settle a question of fact, there may be some situations in which the potential hurt to others is a relevant consideration in adopting or rejecting a *course of action*. Many such calls to compassion are in fact moral arguments that appeal implicitly to moral principles. In such cases, the description of the pitiful situation may simply be a device used to call attention to a relevant moral consideration. However, an appeal to pity in a context in which no relevant and defensible moral premise is lurking about exploits our vague feelings of generosity or concern for others, while usually neglecting or at least obscuring a more relevant principle or issue at stake. In such a situation, the appeal to pity would be a fallacious one.

The irrelevant appeal connected with *flattery* engages in excessive praise of others in order to persuade them of one's view instead of presenting evidence for the position in question. High praise, of course, is not fallacious by itself; it only becomes fallacious when it is used as a substitute for evidence.

Assigning guilt by association is a device used to manipulate an opponent into accepting one's view by pointing out that the opposing view is held by those with negative esteem or by people or groups that the opponent does not like or usually disagrees with, instead of presenting evidence for one's position. This device encourages one to accept the arguer's position in order to avoid any guilt by association with one's personal or ideological enemies. But there is no reason why we should be intimidated into believing or doing something in order to avoid being identified with someone we don't like, since it would be absurd to assume that we will always agree with those whom we like and disagree with those whom we do not like.

Another common type of emotional manipulation is an irrelevant *appeal to group loyalty*. Almost all of us see ourselves as a part of one or more groups: family, club, school, athletic team, church or religious group, company, or country. And we often feel a sense of loyalty to such groups. However, our loyalty to a group is irrelevant when there is a larger or more important principle at stake. Not only do we sometimes have to abandon our loyalty to one group for our loyalty to a more important group, but sometimes we must abandon our loyalty to any particular group in favor of a more important consideration involving all groups.

The *appeal to shame* is also a common emotional appeal. We often feel shame or embarrassment if we have acted in a socially and/or morally inappropriate way. But the manipulators of irrelevant shame try to force support for their position by trying to make us feel shame when we have no reason to because we have done nothing wrong or inappropriate.

EXAMPLE “I can see that you are a person who understands the stock market and how it works, so I won’t bore you with how our brokerage firm handles its transactions. You wouldn’t have come to us if you had not already done your research and discovered what kind of a firm we are. What can I do for you today?” The stockbroker has given the potential client no reasons that are relevant to the merit of using the brokerage firm for stock trades. But it would take a very self-confident person after receiving such flattery to ask: “Wait just a minute. What is your commission rate?” or “Is the rate tied to a minimum number of trades or any other conditions?”

EXAMPLE “Brad, I really think that you ought to take Nicole to the spring dance next Friday. She hasn’t had a date all year. In fact, she has never been invited to go to any dance. Have you ever thought what it might be like to sit alone in your room every time there is a campus dance, while all your friends are doing what you’d like to be doing?” If there is any doubt about whether this appeal to pity is fallacious, look at the argument in standard form:

Since Nicole is sad and lonely, (premise)

because she hasn’t had a date all year, nor has she been invited to a dance before, (subpremise)

[and no one has asked her to the spring dance,] (implicit premise)

[and she would like to go to that dance,] (implicit premise)

[and Brad is available and not taking any other person yet,] (implicit premise)

Therefore, Brad should take Nicole to the spring dance. (conclusion)

If this is a moral argument—and the conclusion’s “should” suggests that it could be—it is not clear what the implicit moral premise is. Could it be that “one is obligated to do what would help relieve the sadness and loneliness of another person, if one is in a position to do so”? Such a broadly stated moral premise could lead to some rather strange moral judgments, such as “one should spend one’s weekends, if possible, visiting sad and lonely professors.” In any case, there seems to be a *more* relevant principle at stake here. If the very purpose of dating is to spend enjoyable time with someone to whom one is attracted, the relevant question is whether Brad should let any feelings of pity he may have for Nicole play a significant role in deciding whether to invite her to the dance. Moreover, if Nicole shares the view held by most of us about the purpose of dating, she may not want to be the object of Brad’s pity. A nonfallacious argument for inviting Nicole to the dance would be one that provides evidence that spending an evening with her would be an enjoyable experience. If Brad took her simply because he felt sorry for her, the reason for doing so would be an irrelevant one.

EXAMPLE “The fact that you witnessed the gang rape doesn’t matter, Gloria. When your own brother-in-law is one of those accused, you just don’t get up on the witness stand and spill your guts. It’s quite possible that you could help send

a member of your own family to prison for twenty years.” Look at what this appeal to family loyalty is asking Gloria to do:

Since the accused rapist is your brother-in-law, (premise)
 [and you know he is guilty,] (implicit premise)
 [because you witnessed it or at least know that he did it,] (implicit premise)
 [and you have the option of lying or telling the truth in your court testimony,]
 (implicit premise)
 and telling the truth may send your relative to prison for twenty years,
 (premise)
 [And considerations of family loyalty demand that you should lie,] (moral
 premise)
 Therefore, you should lie about what you saw. (conclusion)

The appeal to Gloria’s feelings of loyalty is an irrelevant appeal in this context, but the family member is trying to manipulate Gloria’s natural feelings for her family. If Gloria fails to recognize that the appeal is irrelevant, she could very well contribute to a miscarriage of justice, which is a more important issue than family loyalty.

EXAMPLE The following argument, recently overheard in a conversation between a man and a woman, is a clear example of an irrelevant attempt to manipulate another to feel shame. The woman was apparently angry that the man had not opened her car door for her. She said, “Any decent man would have opened the door for a lady!” No evidence is given for why the man should feel *ashamed* or *indecent* for not opening the car door, other than the fact that she is a “lady.”

EXAMPLE “How could you vote for Senator Hamilton? Every gay and lesbian organization in the country has endorsed him. How could you tell anybody whom you voted for?” If the person being questioned is homophobic, this strategy of trying to assign some kind of guilt by association just might work, but it shouldn’t.

ATTACKING THE FALLACY While manipulating emotions is most effective when it is directed to the uninformed or the uncritical, even some of the most reflective people can be aroused by a skillful manipulation of their emotional sensitivities. It therefore behooves all of us to make a special effort not to allow such appeals to intrude on the process of making a reasoned judgment about an issue. One who allows oneself to be overcome by the force of such an emotional appeal is no less guilty of fallacious reasoning than the one who formulates the appeal. More important, we should not let speakers who attempt to exploit our feelings and attitudes think that they have offered relevant reasons in support of a claim.

In response to the use of flattery, there is no need to insult someone who gives you a compliment, but you should not in any way allow the flattery to affect your evaluation of the merit of a view or the rightness of an action. Even if you are convinced that the praise was designed to manipulate a particular response, you could still thank the arguer for his or her remarks and then proceed to ask the questions appropriate to a careful evaluation of the claim.

In cases involving appeals to pity, it might be wise in some situations to acknowledge your aroused feelings openly, yet to state specifically that you are not going to allow them to interfere with the process of coming to a defensible judgment. Point out that accepting a proposal primarily because of those feelings may mean sacrificing what may be a more important principle.

There are two ways you could respond to an arguer who insists that there must be something wrong with you if you think like the “enemy” or the unliked. First, you could forthrightly assert that it makes no difference to you who holds the view in question if they do it for the right reasons. Second, you might point out that a consistent application of the arguer’s claim would reduce it to absurdity. Surely the arguer would not want to say that the merit of an idea or action should be controlled by the whims or behaviors of our rivals. If that were true, we would have to change our views every time they changed theirs.

Finally, since arguments that make irrelevant appeals can sometimes be significantly improved by the substitution of relevant considerations, ask the arguer to try to so modify the argument. If he or she is unable to do so without appealing to the sentiments in question, take the initiative in the discussion and try to engage the arguer in a serious examination of the merit of the claim at issue by indicating some relevant considerations that should be addressed.

ASSIGNMENTS

B. Fallacies of Irrelevant Appeal For each of the following arguments, (1) identify the type of irrelevant emotional appeal illustrated, and (2) explain how the reasoning violates the relevance criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. Rachel, I just can’t vote for him, even though I agree with what you say about the two candidates. It’s just that we have always been Democrats. I’m not sure that I could live with myself if I voted for a Republican.
- *2. What’s wrong with you taking my name when we get married, Kim? It would really be embarrassing to me if we got married and you refused to take my name. In fact, I don’t think I would want to be part of a relationship in which you would show me that kind of disrespect.
- *3. I just don’t understand why you’re opposing federal aid to parochial schools. We Catholics know how badly our schools are in need of financial resources. If this bill for financial assistance to parochial schools doesn’t pass the Congress, it will probably mean that many of our schools will have to close their doors.
- *4. A time-share salesperson: “You mean that after we flew you down here to Florida at no cost to you, put you up in a Gold Crown resort for three days with all meals provided, and took you to Disney World, you’re not going to buy one of our time-shares?”
- *5. Your honor, Dr. Chamberlain is a respected psychiatrist and has been a friend of the defendant’s family for many years. She is in a unique position to be able to testify as to the state of the defendant’s mental health at the time of the crime.

6. Tal, you can't be serious about going to Annapolis! Our family has always been army—your brother, your father, your uncles, and even your grandfather. All of them, as you well know, went to West Point.
- *7. I don't see why you don't want to take your husband's name when you get married. The vast majority of Americans obviously think it should be done that way. It's hard to believe that that many people could be wrong!
8. Professor Beamer, are you sure you want to openly oppose this new curricular proposal? You know that both the president and the dean are pushing it pretty hard, and you don't have tenure yet!
9. If the faculty and staff of this college aren't willing to endorse my reelection to Congress, it may be a long time before you get that new off-ramp that you've been wanting—one that leads directly from the interstate to your campus.
10. I think that we ought to give the Teacher of the Year award to Professor Raley. Ever since his wife died last year, he just hasn't been the same. I think that this award would really lift his spirits. He always seems so sad. I think this year has been hard for him. And he's not really that bad a teacher.
11. The voters of Massachusetts overwhelmingly defeated a proposed gun-control law in the state, which proves that gun control is not a good idea.
12. **JOY:** Did you know that interference from in-laws is the number one cause of divorce in this country?
TERESA: Really? How do you know?
JOY: I heard it on *Oprah* yesterday.

C. For each of the following arguments (1) identify, from among all the fallacies studied in this chapter, the fallacy illustrated, and (2) explain how the reasoning violates the relevance criterion. There are two examples of each of the fallacies discussed in this chapter.

1. I can't believe that you're having both your mom and your dad walk you down the aisle at your wedding. No one in our family or anyone I know has ever had her mom walk her down the aisle. People expect certain things to happen at weddings. You should simply do it the way we've always done it, Beverly.
2. Coach Montgomery, I sure hope my son gets some quality playing time this season. I sure wouldn't want to reconsider my \$50,000 pledge for the new stadium project.
3. Bob, I would have thought that, as a coach, you would *favor* a new NCAA rule lowering the academic eligibility requirement for first-year athletes. That would allow you to have a much larger pool of recruits, and being a non-scholarship school, we need all the help we can get.
4. **CLAUDIA:** I've been going to Weight Watchers religiously twice a week for over a year.
MIKE: Why did you choose Weight Watchers? Aren't there lots of different weight-loss programs?
CLAUDIA: Well, Weight Watchers says that their program is the only way to lose weight safely and effectively.

5. I would never go to Emory & Henry College. It used to be an all-male school. There's no way that we women would be given the same rights and privileges as men.
6. The Surgeon General has said that AIDS can't be transmitted by swimming in a pool with an infected person. But almost *nobody* believes that's true.
7. I was going to let Matt win the match anyway. I haven't been feeling well lately, and I was tired of playing in the hot sun. Besides, I hadn't eaten anything since breakfast.
8. No matter how hard I study, I still don't do well on tests. I always seem to study the wrong stuff. I guess I should just not study at all and take the test cold.
9. I am a strong supporter of capital punishment. The present method of trying to rehabilitate criminals isn't working. Released convicts and parolees always seem to find their way back into prison.
10. Officer, I know that you were only doing your job when you stopped me. In fact, if we had more officers like you, the streets would be much safer. But I've learned my lesson—thanks to you. Do you think we can let this go without a ticket?
11. I don't see how the administration could possibly be serious in telling our fraternity to change our pledging program. We've used the same pledging activities for more than fifty years to test the mettle of the pledges. My father went through those same tests thirty years ago. You can't put restrictions on a rich history like that. There's no way we could change the program.
12. Son, both your mother and I think you should go to Washington & Lee University. If you want us to pay for your education, I think you'd better apply there. Okay?
13. I'm totally against this proposed zoning variance that allows the opening of a new restaurant in town. It would almost certainly take away some of our own restaurant customers and cut into our profits.
14. You know, Cathy, that any sweetener that has aspartame in it is really bad for you. I heard the other day that it even breaks down DNA particles.
15. My mother told me about the hazing by the sororities when she was in school here. I would never join a sorority because I don't want to participate in such a degrading practice. I think hazing is wrong!
16. I know some people oppose capital punishment, but there's no way that you can say capital punishment is morally wrong. After all, more than 70 percent of the American people approve of it.
17. The reason I failed my ethics course this term is that my teacher didn't like me. It's probably because I disagreed with her in class. I also compared my tests with those of several other students, and they all got a higher grade than I did—for basically the same answers I gave. Besides, my parents have been dealing with some difficult issues this year, and it's hard for me to concentrate on my studies.
18. Vitamins are an important supplement to our daily diets. They help make up for what we miss in our food, so I think you should take at least 500 milligrams of vitamin C every day.
19. We need to build a new swimming pool for the community because swimming is one of the most effective exercises for cardiovascular improvement, it doesn't

require any special equipment, and it can be used as a lifelong form of regular exercise.

20. **SENATOR WORLEY:** I think it's time we developed some kind of national health-care plan.

SENATOR LOWERY: You must be losing it, Iris. That's socialized medicine—the very thing that liberals like Ted Kennedy and Hillary Clinton have been trying to shove down our throats for years.

D. Submit an argument that you have read or heard within the past week that defends a position on a current controversial social, political, moral, religious, or aesthetic issue. Photocopy or reconstruct the argument from its source and tape it on a separate page from your typewritten analysis of it. In your analysis, reconstruct the argument into standard form and then evaluate it in terms of the five criteria of a good argument. Point out any *named* fallacies that violate the structural criterion and/or the relevance criterion. Then construct the strongest possible argument in support of an alternative position on the issue.

E. Use a 3-by-5 card to submit an *original* example (found or created) of each of the fallacies that violate the relevance criterion and then create your own strategies for attacking each of them.

F. At the end of the last chapter you were asked to identify each of the fallacies that violate the structural criterion committed by Dad in his first email to Jim. In this second of five emails, Dad commits each of the ten fallacies of relevance discussed in this chapter. Each of the fallacies is committed only one time, and each number represents the presence of a named fallacy immediately preceding it. Identify by name each of the fallacies committed:

Dear Jim,

I appreciate your responding so quickly to my last email. It's comforting to know that your philosophy class has not yet caused you to abandon your faith, and I agree that the fear of hell is not the only reason to believe in God. However, escaping hell for even one minute seems to be a pretty *good* reason to take the leap of faith. You have read the Bible and you know how it describes hell. You also know that it says that if you don't believe, God won't hesitate to send you there. (1) On the other hand, you should not take lightly what God can do for you. If you *believe* in Him, you will not only enjoy his wonderful blessings in this life, which is no small matter, but He will also richly reward you with eternal happiness. (2)

I know that there are other ways of understanding faith in the modern age, but I accept the plan of salvation I just described, because that was what my parents taught me and what their parents taught them. So you can see why I have a lot of respect for that way of understanding faith. (3) In fact, I just don't understand why this generation can't experience what I did in my day. When I was a young boy in school, no one was trying to keep religion out of the schools or anyplace else. We had a prayer every morning, led by the teacher, and nobody complained at all. There's no reason why things can't be the same today. (4)

But many "philosophy types" still refuse to believe. I just don't see what the problem is. After all, the latest Gallup Poll, published last Sunday in the *New York Times*, reported that 96 percent of the American people believe in the existence of God. That God exists seems like a no-brainer to me. Could that many people be wrong? (5) And

even though I don't know much about science, it seems to me that it would be virtually impossible for the wonderful world we live in to just happen. Our minister confirmed this for me in his sermon yesterday; he said it would take trillions of years of trial and error for something like the human mind to "emerge." (6) The most convincing reasons for me to believe that God exists are personal: your mother and I found each other, we had a son like you, and we have had a wonderful life together as a family. (7) Even when things haven't gone as well as we would have hoped, or when my prayers don't seem to be answered, that doesn't mean that God doesn't exist or isn't hearing my prayers or doesn't care about my welfare. It's just that I haven't been committed enough or it's just that God has a better plan for my life. He knows what I need better than I do. (8)

As I consider the good health I've enjoyed most of my life, the business success that I've had, and the wonderfully supportive friends and relatives I have around me, I'm led directly to the conclusion that the God of Abraham, Isaac, and Jacob does indeed exist. (9)

Whatever you ultimately decide, of course, it must be your own decision, but I know that you'll do the right thing and not give us cause to think that we have failed to raise you properly. Jim, promise me that you aren't going to disappoint your family by letting any philosophical doubts change your thinking about religion. When I talked with your mother about this yesterday, she was actually in tears over what you could be doing to yourself, and to her, with this philosophy class of yours. We're counting on your returning home as steadfast in the faith as you were when you left for college last fall. (10)

Sorry for such a long email. Write back when you have time.

Love,
Dad

G. Assume the role of Jim and write an email to Dad that responds to or attacks his poor reasoning in one of the paragraphs in the email above. However, try to attack each fallacy committed without using the actual *name* of the fallacy. Use the skills you have learned from the "Attacking the Fallacy" sections throughout the text to make your case.

FALLACIES THAT VIOLATE THE ACCEPTABILITY CRITERION

This chapter should help you to:

Define or describe in your own words the essential features of each of the named fallacies that violate the acceptability criterion of a good argument.

Recognize, name, and explain the faulty pattern of reasoning in each of these fallacies when it is encountered in ordinary discourse or discussion.

Make use of effective strategies for attacking or helping others to correct their faulty reasoning when they commit any of these fallacies.

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

Each of the fallacies discussed in this chapter uses a premise that fails to meet the conditions of the acceptability criterion. An acceptable premise is a premise that a reasonable person ought to accept. To help determine the acceptability of particular premises, we earlier suggested seven standards of acceptability and five conditions of unacceptability (see Chapter III). If a premise of an argument meets at least one of the standards of acceptability and conforms to none of the conditions of unacceptability, it should be regarded as acceptable.

The fallacies treated in this chapter that violate the criterion of acceptability are divided into two groups: (1) fallacies of linguistic confusion and (2) unwarranted assumption fallacies.

FALLACIES OF LINGUISTIC CONFUSION

The fallacies of linguistic confusion suffer from some lack of clarity in the meaning of a key word or phrase used in the premise of an argument. According to the conditions of unacceptability, a premise that is linguistically confusing cannot be an acceptable premise because we cannot understand its meaning. Since the criteria of a good argument require that an argument have acceptable premises, an argument whose language is not understood is flawed.

A number of common linguistic flaws cause arguments to go wrong: shifting the meaning of a word or phrase and using it in two different senses in the same argument (*equivocation*), using a word that can be interpreted in two or more different ways without making clear which meaning is intended (*ambiguity*), a *speaker* placing a misleading emphasis on a word or phrase and thus causing another to draw an unwarranted conclusion (*misleading accent*), a *listener* placing emphasis on a speaker's word or phrase and then drawing a contrasting claim (*illicit contrast*), manipulating language in such a way that a conclusion is *suggested* but not *asserted* (*argument by innuendo*), drawing a precise inference from an obviously vague expression or defending a particular view with a similarly vague expression (*misuse of a vague expression*), and finally, manipulating language to try to make an important distinction between two things when there is no real difference between them. We will now discuss each of these.

EQUIVOCATION

DEFINITION *Directing another person toward an unwarranted conclusion by making a word or phrase employed in two different senses in an argument appear to have the same meaning throughout.*

In a good argument, the words or phrases used must retain the same meanings throughout the argument, unless a shift in meaning is understood or specified. One who equivocates has either intentionally or carelessly allowed a key word to shift in meaning in mid-argument. A shift of this kind is particularly difficult to detect in long arguments in which the transition in meaning can be more easily concealed.

One who uses a word or phrase that functions in one part of an argument in a very different way from how it functions in another part may cause an opponent to draw an unwarranted conclusion because it looks like support is being given to the claim at issue simply because the words have the same *appearance*. Because the key term lacks a uniform meaning, the logical connection that was assumed to exist between the parts of the argument has been severed; but such a connection is *required* if the premises are to support the conclusion. Such confusion renders the premises unacceptable, and no conclusion can be inferred from them.

EXAMPLE “Gambling should be legalized because it is something we can’t avoid. It is an integral part of human experience; people gamble every time they get in their cars or decide to get married.”

The first use of “gambling” in this argument for legalized gambling refers to games of chance, the use of gaming devices, or both, whereas the second refers to the risk feature of life itself. Because the key word does not have a uniform

meaning, the two uses of it have been severed from each other, and nothing follows from the premises. Here is the argument in standard form:

Since people gamble [take risks] every day, (premise)
 and gambling [taking risks] is an integral part of human life, (premise)
 and such gambling [taking risks] is unavoidable, (premise)
 Therefore, gambling [games of chance] should be legalized. (conclusion)

This argument almost seems convincing. After all, if gambling really is unavoidable, it should certainly be legal. But that conclusion does not follow if the meaning of the word shifts as one moves from the premises to the conclusion. And it does.

EXAMPLE “People who argue against those of us who accept certain things on the basis of faith are no different from us. They also rely on faith; their views are based on their absolute faith in science.”

Those who use this commonly heard response have inappropriately shifted the meaning of the word *faith* in their argument. The first use of *faith* refers to an approach to belief that ignores reason or evidence in favor of an absolute truth that is based on the authority of an arbitrarily chosen person or book. The second use of *faith* refers to a method that produces no absolute truth but beliefs that are constantly being corrected by the force of a good argument or the weight of new evidence. Therefore, the conclusion that people who rely on reason and evidence are “no different from us” does not follow.

EXAMPLE “My college adviser suggested to me that I should take logic because logic, he said, teaches you how to argue. But I think that people argue too much as it is. Therefore, I don’t intend to take it. In fact, I don’t think that it should be taught at all; it will only increase the tensions in society.”

The first use of the word *argue* refers to the process of carefully supporting claims with evidence and sound reasoning. The second use of the word refers to a bitter controversy or to a kind of disagreeable haranguing between individuals. This shift in the meaning of the word could lead one to the unwarranted conclusion that a course in logic teaches one how to be disagreeable.

ATTACKING THE FALLACY There are at least three ways of dealing with an argument that involves equivocation. One way would be to identify the problematic word or phrase and point out to the arguer the two very different ways the word functions in his or her argument. If there is some disagreement about whether the arguer has equivocated, you might ask for precise definitions of the suspect words or phrases, as each is used in the context of the argument. If the definitions are different, then the charge will be proved.

A second way is for *you* to provide a translation of the first use of the questionable word that clearly expresses what you think was the intended meaning of the term and then use the *same* translation for the word in its second or subsequent use. If the premise then makes no sense, or perhaps contradicts the conclusion, it should be clear that the premise that contains the aberrant use is not an acceptable premise, and the argument is not a good one.

A third way to demonstrate the fallacious nature of reasoning that involves equivocation is to use the absurd counterexample method. Construct a simple argument with true premises, but one in which the meaning of the key word shifts from one of the premises to the other. For example:

Since only man [human] is rational, (premise)
 and no woman is a man [male], (premise)
 Therefore, no woman is rational. (conclusion)

The equivocation on the word *man* leads to a conclusion that is obviously absurd. The arguer should be able to understand from such an example how the confusion created by equivocation fails to support his or her own conclusion, directs one to an unwarranted one, or both.

AMBIGUITY

DEFINITION *Directing another person toward an unwarranted conclusion by presenting a claim or argument that uses a word, phrase, or grammatical construction that can be interpreted in two or more distinctly different ways, without making clear which meaning is intended.*

If one does not know which of two or more meanings to assign to an argument's premise, then it is unacceptable because it makes a claim whose meaning is unclear or not known. Hence, no appropriate conclusion can be drawn, because the truth or falsity of a conclusion depends on the acceptability of the premises, and one cannot accept a premise if it is not understood.

This fallacy can be committed in two ways. First, an arguer may use a word or phrase with two or more meanings in one of the premises of an argument. This kind of ambiguity is sometimes referred to as *semantic ambiguity*, as it stems from confusion about a word or phrase. Since a majority of the words in our language have more than one meaning, there is obviously nothing fallacious about using a word with more than one meaning. The fallacy is committed only when the context does not make clear which of the several possible meanings of the word or phrase is intended. This lack of clarity renders the listener or reader unable to draw any conclusion at all or perhaps causes him or her to interpret the word in an unintended way and thus arrive at a false or inappropriate conclusion. Semantic ambiguity can be remedied by clarifying the meaning of the particular ambiguous word or phrase.

Second, an arguer may present a claim that can be legitimately interpreted in two or more distinctly different ways because of its syntactical construction. This is called *syntactical ambiguity*, and such a construction is often referred to by grammarians as an *amphiboly*. Some of the most typical grammatical errors that render a claim syntactically ambiguous are *unclear pronoun reference* ("Fred never argues with his father when he is drunk"); *elliptical construction*, in which words are omitted but supposedly understood ("Susie loves teaching more than her husband"); *unclear modifier* ("I have to take my makeup test in an hour"); *careless use of "only"* (sign on a pump at gasoline station: "We only accept American Express Travelers Checks"); and *careless use of "all"* ("all of the fish Doug caught weigh six pounds or more"). Syntactical ambiguity differs from semantic ambiguity in that it can be remedied not

by the clarification of the meaning of a word but by a grammatical reconstruction of the sentence.

A genuine case of either semantic or syntactical ambiguity in a premise renders the premise in which it occurs unacceptable. If the ambiguous premise is the only support for the conclusion, no conclusion can be drawn.

EXAMPLE Several years ago a faculty colleague, Fred, and I were leaving the campus after a late afternoon meeting. Our homes were within walking distance of the campus, but because it was raining, I said to him, “How about a ride home?” He said “okay” and we walked toward the parking lot. I later discovered that he had accepted what he thought was my offer to give *him* a ride home, while I thought he had agreed to my request to give *me* a ride home. As we stood in the rain in an empty parking lot looking for a car, but not the same car, we learned an important lesson about ambiguity. If this exchange had been put into the standard form of an argument, my question “How about a ride home?” was interpreted by Fred as the first premise of the following argument:

Since Ed has *offered* me a ride home, (premise)
and I have accepted the ride, (premise)
[and he couldn’t *offer* me a ride if his car were not available,] (implicit premise)
[Therefore, Ed’s car will be in the parking lot.] (implicit conclusion)

I, however, interpreted my own syntactically ambiguous question as the first premise of a very different argument:

Since Fred has agreed to my request to give me a ride home, (premise)
[and he would not agree to give me a ride if his car were not available,] (implicit premise)
[Therefore, Fred’s car will be in the parking lot.] (implicit conclusion)

The unwarranted conclusions and embarrassment to which we were both led by the syntactical ambiguity of my question could have been avoided if I had been more careful in formulating it. But my colleague was just as guilty of ambiguity. In the absence of clarification about the meaning of my syntactically ambiguous question, no conclusion should have been drawn about what to expect to find in the parking lot.

EXAMPLE A student says to her adviser: “Last term I took Logic and Introduction to Philosophy. I hope I have more exciting courses this term.” Should the adviser suggest she sign up for additional philosophy or philosophy-type courses because she found them exciting, or should the adviser help her avoid such courses because she wants to take courses that are more exciting than those she just took? Without an understanding of the intended meaning of the student’s syntactically ambiguous statement, the adviser would have no idea what advice to give.

EXAMPLE A recent announcement on our college bulletin board was semantically ambiguous. It simply read: “Personal Security for Women Has Been Canceled for the Rest of the Semester.” Given the fact that our campus security chief had just resigned, it was not clear whether one should conclude that there would perhaps no longer be any security provided at women’s residence halls or that maybe a

scheduled class focused on personal safety for women would not be meeting for the remainder of the semester. Without further clarification, we should have drawn neither conclusion.

EXAMPLE Consider the semantic ambiguity involved in this familiar scene with two people driving in city traffic.

DORIS: You'll have to tell me how to get there.

KENNY: Okay. Turn right here. [Doris turns right.] Hey, I didn't mean for you to turn right! Couldn't you see that I was pointing left?

In this case, of course, Kenny meant for Doris to turn left *immediately*, but as Doris did not happen to see Kenny's leftward pointing, his verbal directions were surely ambiguous and Doris should have sought clarification before doing anything. In standard form, the argument might look like this:

Since Kenny knows how to get to the destination, (premise)

and Doris is willing to follow those directions, (premise)

and Kenny says to turn right here, (premise)

Therefore, Doris should turn right here. (conclusion)

The problem is that the ambiguous meaning of "right here" makes it inappropriate to draw any conclusion, because it is not known which of the two meanings of "right here" is intended.

ATTACKING THE FALLACY As in the case of the fallacy of equivocation, you should identify the word, phrase, or problematic syntactical construction and, if possible, ask the speaker for the intended meaning. Make it clear why you are asking for a clarification. Don't be deterred by the accusation that you are being "picky," for it is not being picky to ask for help in understanding something that you do not understand, and you obviously cannot assess the worth of an arguer's claim or argument if you do not understand key parts of it.

If the arguer is not immediately available to provide clarification, use your own knowledge of the arguer's situation or perspective as a clue to the possible intended meaning. If you are unable to ask your opponent for clarification and you have no access to any knowledge of his or her situation, perhaps you should draw no conclusion at all. If you must do so, you might hypothesize about the intended meaning and draw a very *tentative* conclusion based on that speculation. If the conclusion is consciously tentative, it can be more easily changed with additional information or clarification.

Finally, be careful not to falsely accuse an opponent of ambiguity when none is present. The fallacy of ambiguity has not been committed if the arguer's context makes clear the proper interpretation of the word or sentence. One who interprets a word, phrase, or sentence in an unjustified way because of his or her deliberate disregard of or careless attention to the arguer's context commits a logical error that might be called *false ambiguity*. For example, it would be a case of false ambiguity if Lila claimed that she couldn't determine whether a sign saying "Pizzas Delivered Free" meant that the *pizzas* were free or that they were *delivered* free.

If someone draws an improper conclusion from your statement when its context makes the meaning sufficiently clear and then attempts to place the blame on you, don't be intimidated. Shift the responsibility back to your opponent as quickly as possible by showing how the context of your statement does not support such an interpretation.

MISLEADING ACCENT

DEFINITION *Directing another person toward an unwarranted conclusion by placing improper or unusual emphasis on a word, phrase, or particular aspect of an issue or claim. This fallacy is sometimes committed by taking portions of another's statement out of their original context in a way that conveys an unintended meaning.*

The fallacy of misleading accent is found not only in advertisements and headlines but also in other very common forms of human discourse. A headline may cause the reader to infer a conclusion other than the one supported in the article that follows. An advertisement for a product may address the *quality* but not the exorbitant *cost* of a product or may focus on the advantages of a service but fail to mention an important downside of that service. A news article may tell us what one party in a court dispute said about the case but not what the other party said about the same aspect of the case. In all these cases, the writer or speaker places an accent on, or emphasizes, a selected feature of an issue that may cause another to come to an unwarranted conclusion about it.

One of the most common ways of improperly accenting is to lift words or statements out of their larger whole, thereby omitting important contextual meanings of, or qualifications to, their claims. A premise that lifts certain words or phrases "out of context" in a way that creates confusion or conveys misleading information that may cause someone to infer or arrive at a false or unwarranted conclusion is an unacceptable premise.

EXAMPLE In the midst of the Bill Clinton impeachment frenzy, a network newscast reported that it was disclosed that the 1996 Clinton presidential campaign had accepted more than \$10 million in improperly reported campaign contributions. A day later another network reported that the Clinton campaign had accepted \$10 million in improperly reported campaign funds *and* that the Bob Dole presidential campaign had accepted more than \$17 million of such contributions. The first network report was either a case of incompetent reporting or a clear case of misleading accent. If we put the argument of the first report into standard form, it might look like this:

Since the Clinton campaign committee accepted more than \$10 million in improperly reported campaign contributions, (premise)
 [and such action is against the law,] (implicit premise)
 [and people guilty of violating the law should be held responsible,] (implicit premise)

[Therefore, Clinton's campaign committee should be held responsible.] (implicit conclusion)

Based on the improperly accented "partial story," one might possibly draw such a conclusion, but once the "full story" or larger context is known, one's judgment might be very different. In view of the fact that both campaigns violated the law, one might come to a different conclusion, such as that both campaign committees "should be held responsible," that "it is time that both parties get serious about campaign finance reform," or that "campaign contributions should be more carefully monitored."

EXAMPLE If a father were speaking of the problems of raising his three children and said of his oldest daughter, "*She* won't listen to me" (with a hard emphasis on *she*), you might conclude that the other two children *do* listen to him. If that is not the case, the father might be justifiably accused of having directed his hearers to a false conclusion by putting the stress on *she*.

EXAMPLE Consider the headline of a recent blog entry of Paul Begala: "George W. Bush is One Tough Hombre." It seems reasonable to assume that this headline is a complimentary comment about the courageous character of Bush. The blog itself, however, says that Bush is "one tough hombre" because he is tough enough to sign the death warrant of Karla Fay Tucker, a woman convicted of murder who is in a Texas prison, and then make a joke about it; tough enough to sign another death warrant for a man whose lawyer slept through the trial and snicker about it later; and tough enough to invade a country that was no risk to the United States. The headline is indeed misleading to most readers, and one should draw no conclusion as to its meaning without reading the blog. However, if you knew that Paul Begala was a left-leaning regular commentator on a news network, you could determine by the context that the headline was probably meant to be sarcastic. But such headlines or titles, especially those that appear in supermarket tabloids, often lead to misunderstandings that can be corrected only by reading the articles to which they are attached.

EXAMPLE Suppose that Professor Daigle calls and tells Felicia's roommate, Rhonda, that if Felicia doesn't turn in her paper that day, he will no longer accept it. It would be a gross case of misleading accent if Rhonda reported to Felicia that Professor Daigle had called and said that "he will no longer accept her paper." Rhonda's conveying of the message from Professor Daigle leaves out the most important part of the message. If the entire message had been delivered, Rhonda would probably conclude that she had better hurry and finish her paper and get it in. But without the important "if" clause, she would draw a very different conclusion—that the professor will no longer accept her paper.

ATTACKING THE FALLACY In most cases, one can confront the fallacy of misleading accent much as one does the fallacy of ambiguity. Point out the part of the

argument or claim that you suspect of being inappropriately accented and ask, where possible, for a clarification of the larger context.

You can also guard against being led astray by a case of misleading accent by taking some precautionary measures. Always read or ask for the larger context of any statement you suspect of being accented. You might preclude the possibility of being misled by questionable headlines or titles by determining, if possible, to read the articles to which they are attached before drawing a conclusion. At least you should be very cautious about drawing any inference based on a headline or title alone.

In general, it is always wise to follow the rule “when uncertain, ask.” Don’t be embarrassed to ask about something you don’t understand or suspect of being improperly accented. It is better to be a skeptic, or even run the risk of appearing naive or uninformed, than to come to a false conclusion.

ILLICIT CONTRAST

DEFINITION *A listener’s inferring from another’s claim a related but unstated contrasting claim by improperly placing unusual emphasis on a word or phrase in the speaker’s or writer’s statement.*

This fallacy is one in which the *listener*, rather than the speaker, does the improper accenting. This fallacy is very similar to the fallacy of false ambiguity, in which a listener or reader interprets a claim in a way that is not justified by the context—a kind of *false accent*. But in this case, the *listener* is claiming that the *speaker* accented his or her claim in such a way that added some *contrasting claim* to it, even though there is no evidence that such an implicit contrasting claim was made. Indeed, it is the *listener* who has inappropriately added something to the meaning of the speaker’s claim. For example, if the speaker claims that “logic teachers are very smart,” the listener would be inappropriately extending the meaning of that claim if he or she infers that the speaker is also implicitly saying that “professors in other fields are *not* smart.” The listener has taken the speaker’s claim that “X is true of Y” and extended it to also mean that “X is *not* true of some *contrast* of Y.” The listener has inappropriately accented the original claim and then *illicitly* inferred an unwarranted contrasting claim.

EXAMPLE If a young woman, after an unhappy love affair, claimed that men are insensitive brutes, it would be fallacious to infer from her statement that she was implicitly contrasting men to women, saying that women are *not* insensitive. The young woman was probably not trying to characterize the differences between men and women; she was probably just responding emotionally to her most recent experience with a man. Moreover, even if she were making the claim that all men are insensitive, nothing should be inferred about her thinking regarding the sensitivity of women.

EXAMPLE If a Catholic cardinal were dealing with a situation in which a priest had been discovered to be “taking liberties” with young boys in the parish, he might caution all the priests in his diocese that “it is sinful for priests to take advantage of young boys.” It would be fallacious, since it would be unjustified by the context,

to assume that the cardinal is suggesting that it is *not* sinful for priests to relate sexually to young *girls* or older *women*.

EXAMPLE The following conversation between my two daughters and me took place many years ago (and one of my daughters would prefer that the conversation not be included in this book):

DAD: Isn't that Diana's dress you have on, Cynthia?

CYNTHIA: It's mine now. Diana gave it to me. It's too little for her.

DAD: Well, it looks very nice on you.

DIANA: (speaking from across the room): Then you don't think it looked nice on me?

In standard form, Diana's argument looks something like this:

Since Dad said that my former dress looked good on *Cynthia*, (premise)

[and although he did not actually say that it didn't look good on me, he implicitly said that it didn't look good on me,] (implicit premise)

Therefore, he must not think that it looked good on me. (conclusion)

In this short domestic exchange, Diana committed the fallacy of illicit contrast when she added the implicit premise to her argument. She illicitly accented the word "you" in my comment to Cynthia that "it looks nice on you." The fact was, however, that I did *not* stress the word *you*; I was simply describing how the dress looked on Cynthia. I was making no implicit comment on how it might have looked on someone else.

ATTACKING THE FALLACY Because your opponent is implicitly and falsely claiming that you have accented a particular part of a claim that led him or her to the questionable contrasting claim, you should insist that the burden of proof is on your accuser to demonstrate that the context or your voice inflection encouraged such an interpretation. You, of course, have a peculiar advantage because you can almost always point out that you never uttered the contrasting claim. But your opponent has already acknowledged that you did not actually utter it; the issue is whether you implicitly made the claim and whether you are prepared to defend it.

If you have been accused of making an implicit contrasting claim that you did not make, you might want to deny the unstated claim outright or at least express your willingness to discuss it. However, you will probably also want to make it clear that denying that you made the claim and denying the contrasting claim itself are two different issues.

ARGUMENT BY INNUENDO

DEFINITION *Directing another person toward a particular, usually derogatory, conclusion by a skillful choice of words that implicitly suggests but does not assert that conclusion.*

The force of this fallacy lies in the impression created that some veiled claim is true, although no evidence is presented to support such a view. This method of arguing is commonly used to attack a person, group, or idea when there is little or no

evidence to justify a straightforward claim or accusation. The power of suggestion is used in this way to compensate for a lack of evidence. Because the questionable claim is not explicitly made, one should not draw a conclusion that it wholly based on the confusing suggestion of the arguer. An implicit suggestion cannot serve as an acceptable premise of a good argument.

Nevertheless, the speaker wants the target of the argument to draw the implicit or suggested conclusion even though it does not merit acceptance; it is one for which no evidence is, or is likely to be, given. Hence, it cannot be part of a good argument.

EXAMPLE The power of innuendo usually depends on the tone of the speaker.

MONICA: Are Tonya and James still a “couple”?

PAM: Well, according to *James*, they are.

MONICA: Really? Is she dating anyone I know?

Pam’s implicit claim is that James believes that he and Tonya are still in a relationship. The arrangement of her words suggests that James is unaware that Tonya thinks differently about their relationship or even that Tonya is dating other men—a fact unknown to James. Even though it is difficult to make explicit the tone and implicit suggestions of an argument by innuendo, the standard form of Pam’s argument might look like this:

Since James believes that he and Tonya are in an exclusive relationship,
(premise)

[and James is unaware that Tonya believes and/or perhaps acts otherwise,]
(implicit premise)

[Therefore, James and Tonya are not actually in an exclusive relationship.]
(implicit conclusion)

The implicit conclusion here is based on the implicit second premise. In this reconstructed second premise, Monica inappropriately accepts Pam’s unsupported “suggestion” as an acceptable assertion. Because the meaning of Pam’s words is confusing, Monica should not draw the conclusion that Pam wants. Both of them are guilty of committing the fallacy of innuendo, because an unsupported “suggestive” comment cannot be an acceptable premise of a good argument.

EXAMPLE Sometimes the addition of a single word or phrase in an utterance can lead to a false or unjustified conclusion, even though the words together do not express anything that is not true. Suppose that a dean of students at a college is asked by an employer whether a prospective employee had ever been in any kind of disciplinary difficulty while attending that college. The dean might look at the records and say “no”; or the dean might say “No, we were never able to convict this student of any violations of college rules.” The latter response, unfortunately, would probably have a negative effect on the prospective employee’s chances for employment because it *suggests* something negative although it does not *assert* that negative claim.

Suppose that the prospective employee were still a student at the college in question and the dean said in response to the same question, “No, not yet!” The addition

of the last two words transforms a straightforward negative answer into one filled with innuendo. Moreover, the conclusion that the employer might draw from such a response is one for which the dean would probably not wish to accept responsibility.

EXAMPLE Suppose that you heard the following statement uttered by one of the candidates in a hard-fought gubernatorial race: “If you knew that one of the candidates in this race was receiving money from illegal sources, would that affect your voting decision? Look into the matter and see where the campaign funds of my opponent are coming from. The facts might surprise you.” The speaker has made no accusation against the opponent that requires any kind of defense, but the power of suggestion has done its work.

EXAMPLE A student says, “I often see Professor Iskra, but never with his *wife*.” The particular way in which this last phrase is added to the claim, especially with the emphasis on the word *wife*, would probably suggest that Professor Iskra spends a great amount of time with someone other than his wife. The sentence itself, without stress on any particular word, may express a true proposition, namely, that the student has not seen Professor Iskra with his wife. However, because of the arrangement of the words in the sentence and the stress on the word *wife*, a listener may be led, perhaps falsely, to accept the “suggested” meaning.

ATTACKING THE FALLACY Although an arguer usually will not wish to take responsibility for an unspoken claim, you should perhaps spell out the conclusion to which you have been led and ask the arguer to justify it. In no case should you accept an implicit claim without being satisfied on evidential grounds, because an implicit assertion requires the same justification as does an explicit one. If the speaker is not inclined to defend the claim in question, suggest that he or she specifically deny the implicit claim and take definite steps to counterbalance the effect it has had.

MISUSE OF A VAGUE EXPRESSION

DEFINITION *Attempting to establish a position by means of a vague expression or drawing an unjustified conclusion as a result of assigning a precise meaning to another’s word or phrase that is imprecise in its meaning or range of application.*

There is nothing wrong with using vague language. Almost all of us use vague expressions as a part of our linguistic style. Indeed, such expressions usually function quite well for us when nothing important is at stake. The fallacy occurs when vague expressions are misused.

Vague terms may be misused in two ways. First, a vague expression is misused when it is a key word in a premise used to establish a position. According to the conditions of unacceptability, a premise that is not understood cannot be accepted as providing support for some other claim, and a premise cannot be understood if the key term in it is quite imprecise in its meaning. Neither can such a premise be refuted. If we do not know the range of application of a vague term, we cannot know at what point counterevidence may do some damage to the claim in which it appears. For

example, if we wish to argue against an employee's claim that she is overworked, we must know precisely what it means to be *overworked* before we can know whether the counterevidence we might have weakens or refutes the claim.

The second way in which a vague expression may be misused is if we infer a very specific conclusion from another's vague expression. Since we are not likely to know the intended meaning of another's vague language, any specificity that we may give to it would be arbitrary, and any inference drawn from the arbitrarily interpreted premise would include that same arbitrariness.

A claim with a key term whose meaning is vague or unclear cannot be used as support for any other claim; neither can any more specific claim be inferred from it. If such a claim appears in an argument's premise, it would be an unacceptable one.

EXAMPLE During a public school textbook controversy many years ago in southwest Virginia, some critics claimed to the school board that the use of a particular series of textbooks constituted a violation of a state law that requires public schools to engage in "moral education." They claimed, for example, that to read stories that use profane language or have characters involved in immoral acts taught students to be immoral—the very opposite of what the state had mandated the schools to do. The argument in standard form is as follows:

Since the state constitution mandates that public schools pursue "moral education" as part of their goal, (premise)
 and requiring students to read literature that uses questionable language or includes descriptions of immoral behavior is a violation of that mandate, (premise)
 because such literature is "*immoral education*" or teaches immorality, (subpremise)
 [and school boards ought to comply with state mandates,] (implied premise)
 Therefore, public school students should not be assigned reading in such literature books. (conclusion)

In this argument, a very questionable interpretation has been given to the vague term "moral education." The precision given to the term by the critics would outlaw almost all literature. Even the Bible could not be read, for it has many stories of people doing immoral acts. This is not to say that the term can be easily defined or given a precision on which all would agree, but the critics' assigned meaning seems at best arbitrary and is therefore a misuse of a vague expression.

EXAMPLE At a faculty meeting several years ago, the president of our small college announced that our student enrollment figure was moving us toward a financially dangerous situation. He then suggested that we should perhaps show more concern for some of our weaker students, some of whom were dropping out of school because of failing grades. In response to the president's remarks, one faculty member

indignantly exclaimed that he would quit before he would let the president force him to give a passing grade to a student who did not deserve it.

The faculty member in this case gave his own specificity to the president's vague request to "show more concern for some of our weaker students." Of course, if previous experience gave the faculty member reason to believe that "show more concern" was a euphemism for "don't fail any students," then his interpretation would have been justified. In this instance, however, it was not.

EXAMPLE Several years ago, a Supreme Court ruling regarding pornography included the view that what is "pornographic" should be determined in accordance with "community standards." A local prosecutor tried to establish a case against a bookstore owner charged with the distribution of pornographic materials on the grounds that the bookstore owner had acted in violation of "community standards." To do so he assigned a very precise meaning to that very vague notion of "community standards." He argued to the court that "whatever was presently offensive to more than half of the people in the community" would be pornographic and thus illegal. Since it would have been expensive and maybe not possible to produce a nonbiased poll that might show that a representative sample of the people in the community had *seen the material in question* and more than half of them had found it offensive, he instead called to the witness stand several "average citizens," all of whom claimed to have found the material offensive. The prosecutor's argument didn't work, and the bookstore owner was acquitted. Not only did the prosecutor arbitrarily assign a very precise meaning to a very vague expression, he produced no acceptable support for that questionable translation of the criterion.

It would be just as fallacious, of course, for a prosecutor to argue a pornography case in which an *undefined* notion of "community standards" was used as support. For example, it would be just as much a misuse of a vague expression to argue that "since this act involving graphic materials was not in accordance with 'community standards,' then this act should be regarded as against the law."

ATTACKING THE FALLACY In most cases, vague expressions can be attacked in the same way that ambiguous expressions can; that is, you can insist on further clarification or stipulation of meaning. If a word's range of application is indeterminate, ask for a more precise meaning of the expression. You would then have to determine whether the precision given to the term is appropriate to the present context of the discussion. Such a procedure is particularly important if the issue is a significant one and it is desirable to continue the debate. If nothing of significance is at stake, you can, of course, simply ignore the imprecision.

If you wish to avoid committing the fallacy yourself, refrain from using imprecise language as much as possible when dealing with important or controversial issues. Find new words to replace those that may have become hopelessly vague, or at least specify the meaning of any words that may have become too vague in ordinary usage to convey your intended meaning clearly.

If you do not give specificity to your words, other people will be quite happy to do so. Vague language, by its nature, invites others to impose precise meaning on it. For example, if someone were to say to you, "If you were really concerned about

the pollution problem, as you say, you would help us pick up highway trash this Saturday,” he or she would be giving an unduly precise meaning to your expression of concern for “the pollution problem.” Since there is no legitimate basis for drawing such a specific conclusion, you should not be intimidated by this manipulative tactic. *Your* words do not necessarily mean what *somebody else* says they do.

When an opponent attempts to support a particular claim with a key statement that contains a vague word, you should challenge the acceptability of the premise as well. Simply explain to the arguer that you cannot assess the evidential value of the support as long as the meaning of the vague key term remains undefined or unspecified.

DISTINCTION WITHOUT A DIFFERENCE

DEFINITION *Attempting to defend an action or position as different from another one, with which it might be confused, by means of a careful distinction of language, when the action or position defended is no different in substance from the one from which it is linguistically distinguished.*

Probably the most common occasion of this fallacy is one in which an arguer wishes to diminish the possible embarrassment he or she feels in holding what is probably an untenable position or in engaging in what is probably questionable behavior. One is free, of course, to stipulate the meaning of any term he or she uses, but if the new meaning functions in the same way that the original meaning functions, no difference is made by the attempted distinction. Moreover, since the fallacy is usually committed in response to some form of challenge to another’s position, the alleged distinction, because it constitutes no real difference in meaning, does not blunt the force of the challenge.

An argument that rests on a fundamental confusion about the meaning of a key claim cannot be a good one, for a confusing premise cannot qualify as an acceptable one. In the case of the fallacy of distinction without a difference, there is reason to believe that the claims are substantively the same. Hence, a premise asserting that they are distinguishable claims would be a questionable and therefore unacceptable premise.

EXAMPLE “I’m not saying anything against feminism; I just happen to sincerely believe that the man should be the head of the household.” Let us put this argument into standard form:

Since I believe that the man should be the head of the household, (premise)

[and there is no contradiction between holding the feminist view and the view that the man should be the head of the household,] (implicit premise)

Therefore, I have no serious disagreement with feminism. (conclusion)

This is an example of what is probably an attempt to hide one’s opposition to the feminist or antisexist movement. The first premise and the conclusion are contradictory, although the arguer implicitly claims that they are not in the implicit second premise. But saying that they are not contradictory does not make them not contradictory. The arguer attempts to make a distinction without a difference. Such a claim is confusing at best and false at worst. It at least represents a misunderstanding of the

feminist perspective. Since a confusing claim is an unacceptable one, the conclusion does not follow.

EXAMPLE Suppose the question is whether your brother-in-law is a good driver. It is generally agreed that the ordinary “good driver” obeys the rules of the roads and keeps his or her mind on the task of driving. Suppose that your brother-in-law is easily distracted by events happening along the road and frequently turns and talks to other people in the car, thus failing to see and respond appropriately to important road signs. If his response to the accusation that he is not a very good driver is something like “I’m not really a bad driver; I just don’t pay much attention to the road,” he has made a distinction that exhibits no real difference. He *is* a bad driver, and the force of the accusation against the driver has not been blunted.

EXAMPLE “We must judge this issue by what the Bible says, not by what we think it says or by what some scholar or theologian thinks it says.”

The radio preacher who made this claim apparently thought he was making an important distinction, but it is no distinction at all. If the Bible requires interpretation, and it does, then all people are interpreters. The Bible or any other text doesn’t say anything until it is interpreted by someone—either by a scholar, a theologian, an ordinary reader, or the radio preacher. Therefore, there is no intelligible distinction to be drawn between what the Bible says and what someone says it says. In this particular case, the preacher apparently thought he was telling us what the Bible said, but as a matter of fact, he was merely telling us what *he* thought it said.

ATTACKING THE FALLACY Because many people are unaware that their attempted distinctions are not true differences, the first step that you might take is to try to point out to your opponents the futility of their efforts. If an opponent takes issue with your assessment, which is likely, you might ask for an explanation of just how the alleged distinction differs in meaning. If you are unconvinced by this explanation, you may be inclined to offer a lesson in semantics. But as that would probably not be fully appreciated, why not settle for the absurd counterexample method? Consider the following example: “I wasn’t copying; I was just looking at her paper to jog my memory.” Such an example should clearly illustrate how very different words can function in very similar ways.

ASSIGNMENTS

A. Fallacies of Linguistic Confusion For each of the following arguments, (1) identify the type of linguistic confusion illustrated, and (2) explain how the reasoning violates the acceptability criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

1. **PATTI TO KAREN:** “Your husband seems to have to work late at the office a lot. Does his new female assistant usually have to work also?”

- *2. Just as you can know that the wind exists because you can *feel* it, even though you cannot *see* it, God exists, because even though you cannot *see* him, you can *feel* his presence.
3. A news service headline read: “Los Angeles Cardinal Sorry for Sex Abuse.” The article attached reported that the cardinal had apologized to hundreds of people who will receive a share of a \$660 million settlement dealing with sexual abuse by the church’s clergy.
- *4. I didn’t lie to you; I merely stretched the truth a bit.
- *5. **ROBIN:** I sure feel good today.
JERRY: I didn’t realize that you had not been feeling well.
6. **NANCY:** In the college handbook concerning cafeteria regulations, it says, “Appropriate dress is expected at all times.”
PAUL: That’s terrible. I’m not *about* to wear a coat and tie just to eat in the cafeteria.
7. **LAURA:** Sofia is starting her cooking class next week.
JOHN: I’d like to sign up for it. Is she a good teacher?
- *8. **ANITA:** Is Lorraine helping with the charity show this year?
ANNIE: Well, she comes to our meetings!
9. According to our judicial system, a person is innocent until proven guilty. Hence, the investigation of William Smith, the president’s security adviser, was simply an effort by the media and the Senate to damage the reputation of an innocent man.
- *10. A headline in a country newspaper reads, “Two Doctors for 50,000 Patients.” The article to which it is attached explains that there are only two veterinarians for the estimated fifty thousand domestic animals in the county.
11. I didn’t betray your confidence. I just thought your parents should know what you told me.
12. **SHANDRA:** No, I don’t think I should go out tonight. I take my studies very seriously, and I just have to get some work done tonight.
DEPAKI: What makes you think that I don’t take my studies seriously?
- *13. I don’t know anything about Ron Diss except that he’s a liberal, so I didn’t vote for him. We don’t need another critic of the military in the Congress.
- *14. **JOLIE:** When I asked Dad to help me with my calculus homework today, he said that he couldn’t.
SELA: That’s strange! His understanding of high school calculus was a great help to *me* when *I* was taking calculus.

UNWARRANTED ASSUMPTION FALLACIES

The patterns of argument discussed in this section are fallacious because their premises employ highly questionable, although sometimes popular, assumptions. Typically, these assumptions are implicit or unstated but nevertheless crucial to the force of the argument. Because these questionable assumptions are used to support premises in arguments, the premises are likewise unacceptable. Since one of the conditions of unacceptability states that a premise is unacceptable if it “is based on a usually unstated but highly questionable assumption,” such a premise cannot be part of a good argument.

Consider the argument that the college baseball team will have a better coach next year because the college has fired the old one and hired a new one. The single premise of the argument is clearly based on the unstated, unwarranted assumption that “new is better.” But this assumption is contradicted by the evidence, since every idea, law, policy, or action requires a defense that is independent of its novel character. Indeed, a premise that assumes that whatever is new is better would lead to the absurd conclusion that every single proposed alternative to the present way of doing things would automatically deserve our acceptance.

The assumption that “new is better” and many other unwarranted assumptions are a part of our conventional wisdom, because they have a ring of truth. They may even *be* true in some contexts. The problem is that in *other contexts* or under *other circumstances*, they are clearly false. Some of the most common of these assumptions include the assumption that small differences on a continuum between extremes have a negligible effect (*fallacy of the continuum*), that what is true of the parts is true of the whole (*fallacy of composition*), and that what is true of the whole is also true of the parts (*fallacy of division*). Other common unwarranted assumptions are that alternatives are usually limited to two and that one of them is true (*false alternatives*); that what *is* the case, *ought* to be the case (*is-ought fallacy*); that what we *want* to be the case, *will* be the case (*wishful thinking*); that rules or principles have no exceptions and that a rule can be refuted by a single exception (*misuse of a principle*); that the middle position between extremes is the best position because it is the middle position (*fallacy of the mean*); and finally that things that are alike in one or more respects are alike in some other respect (*false analogy*). No argument should be allowed to proceed under the conviction that any one of these common assumptions is true. We will look at each of these fallacies below.

An argument that rests on an unwarranted or unacceptable assumption may have its faulty character blatantly exposed by explicitly stating the beguiling assumption as part of a reconstructed argument. Articulating the assumption in this way is by itself sometimes sufficient to convince even the arguer of its unacceptability. Once the unacceptable premise is recognized as being crucial to the force of the argument of which it is a part, then the argument too should be seen as a faulty one.

FALLACY OF THE CONTINUUM

DEFINITION *Assuming that small movements or differences on a continuum between a thing and its contrary have a negligible effect and that to make definite distinctions between points on that line is impossible or at least arbitrary.*

The unwarranted assumption involved in this fallacy is very common, and it is not always easy to persuade others of its dubious character. It is often expressed as “it’s only a matter of degree” or “small changes don’t make any real difference.” Such thinking often leads to the absurd conclusion that contraries (opposites), as long as they are connected by intermediate small differences, are really very much the same. It thus fails to recognize the importance of making what might appear to be arbitrary distinctions or cutoff points on the *continuum* between extremes or opposites.

A more graphic name for this fallacy might be the *camel’s back fallacy*, as in “one more straw won’t break the camel’s back.” Anyone who has played the

child's game "The Last Straw" knows that one more straw *can* break the camel's back. In the game, each player has a handful of very lightweight wooden "straws." Then players in turn place a single straw in a basket on the camel's back. The player who places the straw that breaks the camel's back—that is, causes it to collapse—loses the game. There *is* a straw that makes the difference between the camel's back's breaking and not breaking. Similarly, a distinction can often be made on a continuum between one category and its contrary, even though clear distinctions between these categories are sometimes not easy to draw. At what point, for example, does a warm evening become a cool one or a girl become a woman? There really *is* a difference between a warm evening and a cool evening, just as there is a difference between a girl and a woman. Even though making distinctions may in some cases seem somewhat arbitrary, it is often appropriate or even necessary to make distinctions. It would at least be fallacious to assume that such distinctions could *not* be made.

The ancient name of this fallacy is the *fallacy of the beard*; it originates from the debate about "how many hairs would one have to have in order to have a beard?" We would probably be reluctant, because it would appear arbitrary, to specify a certain number of hairs; but obviously there is a difference between having a beard and not having a beard. For practical purposes, then, some cutoff point can and sometimes must be established on a continuum between extremes. For example, a police officer must determine whether a person is either speeding or not speeding. If no cutoff points could be established, no one would ever be guilty of driving too fast.

The implicit assumption underlying the premise used in the fallacy of the continuum—namely, that small differences are unimportant or that contraries connected by intermediate small changes are not significantly different—is an indefensible or unwarranted assumption. For that reason, the premise employing it is unacceptable and cannot be used as part of a good argument.

EXAMPLE More than a few people have been convinced that a slightly larger monthly payment isn't going to make very much difference.

ARIS: I just can't afford that much for a cell phone right now.

KRIS: Why don't you just put it on your credit card?

ARIS: But the monthly payment on my account is already \$300 a month.

KRIS: But it will only add about twenty-five bucks to your monthly payment.

ARIS: But I would also have to pay the monthly rate for the phone. That's another \$60 a month.

KRIS: You can put that on your credit card, too. It can't make *that* much difference.

Let us reconstruct this argument in standard form:

Since putting the new phone on your credit card will raise your monthly payment from \$300 to about \$325, (premise)

and putting the monthly rate of \$60 on the credit card will raise the monthly payment to only \$385, (premise)

[and these small changes on a continuum would have a negligible effect,] (implicit premise)

Therefore, you can afford to buy the new phone. (conclusion)

Such reasoning, if it leads Aris to this and additional purchases, need occur only a few times before he might be in very real financial difficulty with credit card limits, monthly payments, or both. A little bit *does* make a difference.

EXAMPLE Arguments using the assumption involved in the fallacy of the continuum are very persuasive. Indeed, even a student who has carefully studied this fallacy has been heard to argue in the following manner: “Professor Gaia added five points to every student’s *final* numerical average. It seems to me that if she added five points, she could have gone on and added six points. Then I would have passed the course. After all, there is very little difference between five points and six points. Yet that one point made the difference between passing and failing the course. Tim had a sixty-point average after the five-point addition, and I had a fifty-nine. He passed and I didn’t; but does he really know that much more about psychology than I do?”

It is probably the case that the student with the fifty-nine average did not know much less psychology than the student with the sixty average, but for practical purposes, a cutoff point has to be established in order to avoid making extremes—for example, knowing and not knowing psychology—indistinguishable.

EXAMPLE What person on a diet or trying to quit smoking has not been deceived by the argument that one more donut or one more cigarette surely can’t make any real difference?

ATTACKING THE FALLACY The kind of reasoning exhibited in the fallacy of the continuum can be easily reduced to absurdity by the following strategy: Ask the person who has committed this fallacy for the definition of a vague term such as “rich person.” Try to get him or her to be specific about the amount of assets in dollars that a person would have to have in order to qualify as “rich.” Call that amount X . Then subtract a small amount, for example, \$1,000, from that number and ask if a person having X minus \$1,000 would still be rich. Your opponent will no doubt say “yes.” Repeat the question again and again, subtracting another \$1,000 or more each time. Your opponent will probably continue to say “yes” every time, until it becomes clear where the questioning is going to lead, namely, that he or she will soon be assenting to the claim that a person having X minus X dollars is rich, which is an absurd claim. The arguer should be able to recognize from this example that the assumption that small differences are unimportant renders him or her vulnerable to such manipulation. The arguer should also be able to see that the same kind of thinking is exhibited in his or her own argument and could lead to a similarly absurd conclusion.

The arguer who commits this fallacy must also admit that distinctions can and sometimes must be made. For example, there must be a difference between winning and losing a basketball game or between failing or passing a course. In spite of the fact that these are extremes on a continuum, one or the other will turn out to be

true, even though the outcome will be decided by one *small* point—just as the judge may decide whether you are guilty of speeding by one *small* mile per hour.

FALLACY OF COMPOSITION

DEFINITION *Assuming that what is true of the parts of a whole is therefore true of the whole.*

The implicit premise used in the fallacy of composition—namely, that what is true of the parts of a whole is therefore true of the whole—is an indefensible or unwarranted assumption. Although this assumption may be true in some cases, it does not merit our acceptance as a general claim. Moreover, any premise that explicitly or implicitly employs such an unwarranted assumption cannot be an acceptable one.

This fallacy is committed principally in those cases in which a “whole,” because of the particular relationship of its parts, may take on different characteristics from those of its individual parts. For example, the fact that each of the players on a football team is an excellent player would not be a sufficient reason to infer that the football team is an excellent one. The gathering together of players with excellent individual skills might produce a team that is *not* so excellent if, for whatever reason, the skills are not effectively meshed into team play. One cannot attribute to a whole those characteristics that are attributed to each of its parts simply because the whole is made up of those parts. Such an assumption ignores or fails to understand the fact that the way the parts relate, interact, or affect each other often changes the character of the whole.

This fallacy should not be confused with the fallacy of inferring something about a whole class of things on the basis of one or a few instances of that thing. That fallacy has to do with insufficient evidence. The fallacy of composition is using the unwarranted assumption that we can infer something about a characteristic of a whole based on a characteristic of each of its parts.

Some instances of this fallacy are not at all difficult to recognize. For example, suppose that Larry said to Paul: “Paul, you and I love doing things together, and my friend Barbara and I love spending time with each other; so I’m sure that if the three of us take a vacation together, we’d have a really great time.” Neither would we fail to see the fallacy committed by a small child who argued in this way: “I love the taste of orange juice and I love bran cereal, so I think that if I put orange juice on my cereal rather than milk, it would taste great.” Some instances of this fallacy, however, are not so easy to detect.

EXAMPLE “Professor Pour and Professor Warden are going to team-teach a course next spring in the philosophy of science. They are two of our best teachers, so it ought to be a really good course.” The standard form of this argument is as follows:

- Since Professors Pour and Warden are going to team-teach a course, (premise)
- and they are among our best teachers, (premise)
- [and the course will be well-taught,] (implicit premise)
- [because what is true of the parts is true of the whole,] (implicit subpremise)
- [and a well-taught course is a good course,] (implicit premise)

Therefore, the course will be a good one. (conclusion)

If Professors Pour and Warden are good teachers in the sense in which that term is ordinarily used in an academic context, it may be that the team-taught course would be a poor one. Many “good” teachers are good by virtue of their total and singular control of the classroom. A team-taught course usually does not allow for such control. There could also be other reasons, of course, why the two professors might not work well together as a whole.

EXAMPLE “Our college concert choir auditions brought in several hundred people to try out for the choir this fall. That process yielded thirty excellent singers, so we should have an excellent choir this year.” This claim made by the choir director, who should know better, falsely assumes that excellent parts will make an excellent whole. A number of factors could prevent the choir from being excellent. For example, the voice qualities of some good singers might not blend well with the voice qualities of other good singers, and as a result, the choir sound might turn out to be quite mediocre in quality.

EXAMPLE Who has not heard this fallacy committed in the most casual comments? “Dan is a fine young man, and Rebecca is a fine young woman. They’ll make a fine couple.” The whole called “marriage” is more than a sum of its parts. Hence, the parts, by virtue of their relationship in the marital whole, might create something very much lacking in “fineness.”

ATTACKING THE FALLACY It is important to recognize that wholes are not *always* different in character from their parts. For example, if every cup of punch taken from the punch bowl is sour, it would be entirely warranted to draw the conclusion that all the punch in the punch bowl is sour. In this case, there is nothing about a cup of this punch that, when it was mixed with all the other cups of punch, would change the taste or character of the whole bowl of punch.

In some cases, then, evidence for a claim about a whole is provided by facts about the parts. For an “attack” strategy, then, you might say to your opponent that you understand why he or she might have drawn a conclusion about a characteristic of the whole based on a characteristic of the parts, for in some cases the parts do provide that evidence. At the same time, you might use an example to illustrate how such an understandable assumption can lead to absurd conclusions in other cases. Consider this one: Julie may have a very pretty blouse, a pretty skirt, and pretty shoes, but they will not necessarily make a beautiful outfit together. The clash of patterns or colors could render the outfit quite garish. The unwarranted assumption, you should point out, lies in assuming that a characteristic automatically passes over to a whole from the parts.

FALLACY OF DIVISION

DEFINITION *Assuming that what is true of a whole is therefore true of each of the parts of that whole.*

The fallacy of division is the opposite of the fallacy of composition. Rather than assuming that a characteristic of the parts is therefore a characteristic of the whole, this fallacy makes the unwarranted assumption that a characteristic of the whole is

therefore a characteristic of each of the parts. However, as we have seen, a whole often represents something quite different from its parts.

Another way of committing the fallacy of division is to infer something about a particular member of a class on the basis of a *generalization* about the whole class. In this case, the characteristic of the whole should not be applied to the parts because the characteristic of the whole is only a statistical generalization based on the characteristics of *most* of the parts. Such a characteristic of the class is attributable to many of its parts, but because it is impossible to know to which members of the class the generalization may apply, it would be fallacious to assume, without additional evidence, that the characteristic accurately describes any particular member of the class.

The implicit premise in the fallacy of division involves this unwarranted assumption and is therefore an unacceptable one. It is simply not the case that what is true of a whole is always true of each of its parts. Neither can one infer that what has been generalized to be true about a class of things is true of every member, or any particular member, of that class.

EXAMPLE Suppose that a high school senior rejected the idea of attending the University of Virginia on the grounds that he or she preferred small, intimate classes. To think in this way would be to commit the fallacy of division, because the student could not properly infer that a large university would have only large classes. Such an argument in standard form would look like this:

Since I do not want to attend a college with large classes, (premise)
 [and the University of Virginia is a large college,] (implicit premise)
 [and the University of Virginia has large classes,] (implicit premise)
 [because what is true of the whole is true of each of the parts,] (implicit
 subpremise)
 Therefore, I do not want to attend the University of Virginia. (conclusion)

The unacceptable third premise is based on the implicit unwarranted assumption in the subpremise and therefore violates the acceptability criterion of a good argument. Moreover, even if it were statistically true that large universities have large classes, the student could not reasonably infer that all classes or any particular class in a large university would be large.

EXAMPLE It may be true that Ron has a handsome face; yet it may not be true that any particular part of his face—for example, his nose or his mouth—is handsome apart from the rest of his face. In this case, a characteristic of the whole is not necessarily a characteristic of the parts.

EXAMPLE Although normal human beings are conscious entities, we should not infer from such a characteristic of the whole, as some have done, that individual cells or parts of that whole are conscious entities.

ATTACKING THE FALLACY The attack on the fallacy of division is similar to the attack on the fallacy of composition. Say to your opponent that you understand

why he or she might have drawn a conclusion about a characteristic of the parts based on a characteristic of the whole, because in some cases evidence for a claim about the parts is provided by facts about the whole. Then you might demonstrate how such an understandable assumption could lead to absurd conclusions in some cases. For example, you might point out how absurd it would be to assume that a particular state is diversified in terms of its geographic features simply because it is a part of the United States, which is geographically diverse.

To make the case against drawing conclusions about members of a class based on a generalization about the whole, you might try this example: If it is statistically the case that computers do not break down during their first three years of use, it would be absurd to assume that your particular computer would not break down during its first three years.

FALSE ALTERNATIVES

DEFINITION *Restricting too severely the number of proposed alternative responses to a problem or situation and assuming that one of the suggested alternatives must be the true or the right one.*

This fallacy is sometimes referred to as the *black-and-white fallacy*. The fallacy of false alternatives, however, is not just thinking in terms of extremes, as suggested by the terms *black* and *white*. It is either an oversimplification of a problem situation by virtue of a failure to entertain or recognize *all* of its plausible alternative solutions, or it is placing a limitation on the number of alternative responses that is too small. A premise that is based upon the unwarranted assumption that limits the alternatives in this way and assumes that this narrow range of alternatives contains the right or true one is unacceptable.

The “either-or” assumption is reliable only when one is dealing with *contradictories*. Contradictories exclude any gradations between their extremes, so it is quite proper to limit the number of alternatives to two; for a thing is either *X* or not-*X*. One of the two extremes must be true and the other false. There is no middle ground between a term and its negative, for example, between hot and not-hot.

The fallacy of false alternatives most often occurs when one inappropriately treats contraries as if they were contradictories. Contraries, unlike contradictories, allow a great number of gradations between their extremes. There is plenty of middle ground between a term and its *opposite*, for example, between hot and cold. It is also possible for both extremes to be false. If one claimed that it must be either hot or cold, he or she would be committing the fallacy of false alternatives, by assuming too few alternatives and assuming that one of the alternatives must be the true or right one.

EXAMPLE Suppose that Professor Saliba claims that abortion is either morally right or morally wrong, and goes on to say that very few people, if any, would argue that abortion is something that we *should* do, so abortion must be wrong. Since Professor Saliba is implicitly defining morally right as “morally obligatory” and morally wrong as “morally prohibited,” he has committed the fallacy of false alternatives because he has failed to entertain at least one other morally relevant

alternative—to treat abortion as “morally permissible.” The terms *right* and *wrong* should have been treated as contraries or opposites, which allow for some middle ground alternatives. They were instead treated as if they were contradictories, which resulted in Professor Saliba’s unwarranted “either-or.” The unwarranted assumption embedded in this argument is clearly revealed when we convert the argument to standard form:

Since abortion is either morally obligatory (right) or morally prohibited (wrong), (premise)
 [and these are the only moral alternatives,] (implicit premise)
 and no one would argue that it is morally obligatory to abort a fetus, (premise)
 Therefore, abortion is morally prohibited. (conclusion)

This conclusion would not follow but for the unwarranted implicit second premise, which precludes the option of the moral permissibility of abortion.

EXAMPLE A case of treating contraries as if they were contradictories is also seen in one of the well-known sayings of Jesus: “If you are not for me, you must be against me.” A similar instance may be found in the claim that if one is not a theist, then one must be an atheist. Neither claim seems to allow for the alternative of neutrality or agnosticism.

EXAMPLE It is very common for traditional theists to argue that either God created the universe as it is or that it occurred by pure chance. Since it is highly unlikely that the kind of world we live in could have come about by sheer chance, God must have created the world as it is. Such an argument commits the fallacy of false alternatives because there is another plausible alternative that the arguer has failed to consider—the alternative of natural selection. The arguer, however, has limited the alternatives to two, as if they were contradictories, and assumed that if one of them is likely to be false, the other must be true. Since the two alternatives are not contradictories, however, one cannot make such an inference. The third alternative, natural selection, is quite different from the alternative of chance; it refers to a highly complex causal process of traceable factors that could be shown to rationally account for the universe as we know it.

ATTACKING THE FALLACY Genuine “either-or” situations are very rare. If you are presented with one, it probably would be a good idea to treat it with a bit of skepticism; unless, of course, the either-or is a set of contradictories. In almost all other cases, more than two alternatives are available, although the arguer may have ignored those additional alternatives.

As a means of attacking an argument based on limited alternatives, ask the arguer whether the alternatives presented exhaust all the plausible options. If the arguer is unable or unwilling to come up with any additional alternatives, point out a number of them yourself, and challenge the arguer to show why they do not qualify as plausible solutions. Once all the plausible alternatives have been considered, then

the question becomes that of determining which of the plausible alternatives is best supported by the evidence or by good reasons.

IS-UGHT FALLACY

DEFINITION *Assuming that because something is now the practice, it ought to be the practice. Conversely, assuming that because something is not now the practice, it ought not to be the practice.*

The is-ought fallacy is permeated by moral or value overtones. The “way things are” is regarded as ideal or “as it should be” simply because “things” are as they are. No reasons are given in support of the appropriateness of a thing’s being either the way it is or the way it ought to be. It is simply assumed that if a practice is now in place, it must be right, and if it isn’t now in place, the absence of the practice must be right.

This fallacy should not be confused with the appeal to tradition. In the case of the irrelevant appeal to tradition, it is argued that the status quo should be maintained out of *reverence for the past*, but in the case of the is-ought fallacy, it is argued that the status quo should be maintained simply because it is the status quo. It is assumed that if it is the status quo, then that fact alone is sufficient reason for its appropriateness.

The is-ought fallacy should also not be confused with the irrelevant appeal to common opinion. The appeal to common opinion is typically used in a faulty attempt to establish the *truth* of a claim on the grounds that it is thought to be true by a large number of people. The is-ought fallacy, however, is used to establish the *rightness* of a particular policy or practice on the grounds that it is presently the policy or practice.

A premise that embodies the unwarranted assumption that because a thing is now the practice it ought to be the practice is an unacceptable one. The fact that some way of doing things *is* now in place provides no support for whether it *should* be the way things are done.

EXAMPLE

AMANDA: Rick, let’s go to Paris on our vacation next spring.

RICK: I really don’t think we should go to France. We always go to a different country every year, and we have already been to France.

If we put Rick’s argument into standard form, it would have this structure:

Since our practice has always been to vacation in a different country every spring, (premise)

[and the practice that is in place is the practice that should be in place] (implicit premise)

and we have already been to France, (premise)

Therefore, we should go someplace other than France next spring. (conclusion)

The unwarranted assumption expressed in the second premise is clearly exposed. Since a premise based on an unwarranted assumption is not acceptable, the fact

that Amanda and Rick have always gone to a different country every spring lends no support for what they should do in the future.

EXAMPLE “Marijuana is illegal, son! If there were nothing wrong with it, it wouldn’t be illegal. Don’t you understand?” The fact that the sale and possession of marijuana are illegal constitutes no reason for the propriety of that status. In other words, there is no logical justification for claiming that because it is illegal, it ought to be illegal.

EXAMPLE

PROFESSOR TAYLOR: Students should be allowed to be more involved in the decision-making processes at this school.

PROFESSOR BURNS: The fact is that a college is just not very democratic. So let’s not tamper with the institutional structure. Let’s concentrate on some other important things that need our attention.

Professor Burns does not even entertain the possibility of introducing more democracy into the institutional structure, simply because that is not the “way things are.”

ATTACKING THE FALLACY A good argument always requires evidence or good reasons to support its conclusion. If no evidence or reason is given for a policy or practice other than that it is the status quo, you should point out to the arguer that such “evidence” is not evidence and ask for some *appropriate* support for his or her conclusion. If the arguer is able to provide such support, you can then determine whether the policy or practice deserves your support.

As an illustration, you might point out that although some people are being discriminated against because of their gender, that fact is not an acceptable reason for continuing the practice of sex discrimination. If an arguer has other reasons for the view that people should be treated differently on account of their gender, then those reasons should be presented for proper evaluation.

In some cases, you may need to resort to the absurd counterexample method. You should have no trouble finding good examples, but consider this one: “Since the majority of drivers now break the speed limit, drivers *should* break the speed limit.” The faulty character of this argument should be transparent to even the most committed users of the is-ought.

WISHFUL THINKING

DEFINITION *Assuming that because one wants something to be true, it is or will be true. Conversely, assuming that because one does not want something to be true, then it is not or will not be true.*

There is usually nothing fallacious about wanting things to be a certain way. Wishing for some particular outcome is fallacious only when one treats that wish as if it were a premise in support of a conclusion that the wish will turn out to be true. A premise that is based on this unwarranted assumption is not an acceptable one.

This main premise in a wishful thinking argument embodies the assumption that our feelings or emotions about a particular claim provide some support for the truth or merit of that claim. Indeed, many of our strong religious and other ideological beliefs seem to be built on no more than our intense wish that those beliefs be true. Some writers have even suggested that wishful thinking could be called the *fallacy of belief* or even the *fallacy of faith*. “If you have faith in X,” we are sometimes told, “then X will be true.” We are even told that something can be true “for you” if you believe it to be so. Although it is possible in some cases that wanting something to be true may give one the motivation to expend effort in helping to bring it into being, simply believing that something is true does not make *anything* true.

The fallacy of wishful thinking is sometimes difficult to distinguish from rationalization. Both the rationalizer and the wishful thinker want a claim to be true, but while the rationalizer attempts to establish that claim by means of irrelevant phony premises, the wishful thinker tries to establish it exclusively on the unwarranted assumption that his or her wishing it to be true will make it true.

EXAMPLE An argument for life after death put forth by a British theologian goes something like this: “There must be a life after death because almost all people desire it. It is a part of the very nature of human beings to desire it. If there were no life after death, then why would all humans desire it?” The standard form of this argument might look like this:

Since most people desire life after death, (premise)

[and whatever people wish to be true is or will be true,] (implicit premise)

Therefore, there is life after death. (conclusion)

Even if it were the case that the desire for an afterlife was almost universal, there is good reason to believe that a universal desire can and often does go totally unsatisfied. Consider, if you will, the desire of most people to have more money than they do. Wanting something to be the case, even if it is universally desired, does not make it so.

EXAMPLE “My husband has been missing for more than ten years, but I know he’s still alive. He just couldn’t be dead.” It may be true that he is still alive, but this woman’s wishing him to be alive provides no support for the claim that he is.

EXAMPLE “There is a perfect marriage partner out there for everyone in this world. That is what everyone wants—a perfect marriage. If you look hard enough for it and then work hard enough at it, you’ll have a perfect marriage.”

Sometimes wishing that something will happen can have some effect on whether it does, but only in those cases in which we are directly and dynamically related to the situation. Even then, we rarely have total control over it, especially something as complex as marriage.

ATTACKING THE FALLACY One method of attacking the fallacy of wishful thinking would be to offer strong evidence for a claim that is contrary to the claim at issue

and to ask your opponent to evaluate that evidence. The serious believer will presumably want to find some way to counteract the force of your evidence. In order to counter it, he or she may have to abandon an exclusive reliance on the “evidence” of wishes.

Another strategy would be to set forth, if possible, a denial of the wishful thinker’s conclusion and then cite as your only “evidence” your *wish* or belief that your negative claim is true—the same “evidence” that your opponent cites for his or her positive view. Since your conclusions are contradictory, at least one of you must be wrong, because contradictory claims cannot both be true. Determining who is wrong may require, if all goes well, a cooperative evaluation of independent evidence—evidence that has nothing at all to do with wishes.

Finally, you might try an absurd counterexample. Ask your opponent whether his or her wish-based thinking is any different from a woman’s concluding that she is not pregnant simply because she does not *want* to be pregnant.

MISUSE OF A PRINCIPLE

DEFINITION *Misapplying a principle or rule in a particular instance by assuming that it has no exceptions. Conversely, attempting to refute a principle or rule by means of an exceptional case.*

There are usually exceptions to almost any principle or rule that we adopt or endorse. One who misuses a principle ignores this fact and makes the unwarranted assumption that a principle has no exceptions. This can be done in two ways. One way is that the arguer simply fails to take into account reasonable exceptions to the principle’s range of application and applies it to situations for which it was not intended.

The second way of misusing a principle is to assume that unusual or exceptional cases will falsify or refute a principle or rule. The arguer fails to realize that unusual circumstances do not negatively affect the general truth or merit of an otherwise well-established principle or rule. As a matter of fact, just the opposite is probably the case, which makes sense of that strange-sounding phrase sometimes directed to those who think they have refuted a principle by pointing out alleged exceptions to it: “The exception proves the rule.” A premise that assumes that general rules and principles have no exceptions or that unusual cases can refute them represents a misunderstanding of their nature. Because this fallacy involves the problem of dealing with unusual or accidental circumstances, it is sometimes referred to as the *fallacy of accident*. Regardless of what it is called, an argument that uses a premise that assumes that principles or rules have no exceptions is not a good argument.

EXAMPLE Suppose that Ms. Hoel plans to operate a used-car business on her property in a residential area of town, and she argues that zoning restrictions do not apply because it is her property and she can do anything she wants with it. In standard form, Ms. Hoel’s argument looks like this:

Since I want to operate a used-car business on my residential property,
(premise)

and the relevant principle is that I can do whatever I want with my own property,
(premise)

[and that principle has no exceptions,] (implicit premise)

Therefore, I should be able to operate my used-car business on my own property. (conclusion)

A principle to which most of us would probably subscribe is that people are generally entitled to use their own property in whatever way they wish. But it would be a misapplication of this principle to claim that *no* restrictions could be legitimately imposed on the use of that property. What one property owner does with his or her property, such as starting a small pig farm in the backyard between the sandbox and the barbecue pit, can negatively affect others in the neighborhood. The implicit third premise in the argument claiming that the principle in question has no exceptions is an unwarranted assumption and is therefore an unacceptable premise.

EXAMPLE If the rule with regard to X-rated movies shown at a drive-in theater is that “no one under eighteen will be allowed into the theater,” it would be a misapplication of this rule for an attendant to refuse to allow a couple to bring their sleeping infant child with them. The rule was not intended to be applied in such cases.

EXAMPLE An example of the second form of this fallacy might be an argument that attempts to refute the principle that “lying is wrong” by pointing out that a psychological counselor surely would be justified in lying, if necessary, to keep from betraying a confidence. This exception to the principle against lying would not allow the arguer to draw the conclusion that the moral rule that “lying is wrong” is false. It should simply be the occasion to recognize the fact that moral principles often come into conflict and that a choice must be made between them, usually in terms of which principle has the greater importance or priority in the context.

ATTACKING THE FALLACY One way of pointing out the fallacious character of a particular misapplication of a principle is to examine very carefully with your opponent the purpose of the principle or rule. You could show how an “exception” to the principle might be quite acceptable if that exception is not violating that principle, as in the drive-in example. You could also show how an exception might be appropriately made if the principle were being trumped by some more important, conflicting principle in the situation, as in the pig farm example.

Another line of attack might be to find some general principle with which your opponent would agree, and then find an exception to that principle with which he or she would also agree. For example, your opponent would probably agree that parents have the responsibility to raise their children in whatever way they think best, but he or she would probably also agree that parents do not have the right to use physical abuse as part of their method. If the arguer recognizes legitimate exceptions in this illustration, he or she should be willing to acknowledge possible exceptions to the principle that he or she is misusing.

FALLACY OF THE MEAN

DEFINITION *Assuming that the moderate or middle view between two extremes must be the best or right one simply because it is the middle view.*

Another name for this bit of faulty thinking is the *fallacy of moderation*. It is often assumed—indeed, it is unfortunately a part of our conventional wisdom—that a position on an issue that is somewhere in the middle is always the best simply because it is in the middle. However, the fact that a particular position is the moderate one has nothing to do with its worth. Even though in some situations, a moderate view may in fact be the best or most justifiable position to take, in many other situations, the so-called *extreme* or *radical* solution to a problem is the most defensible one. In any case, a premise that embodies the unwarranted assumption that the middle position is always the best one is an unacceptable premise and can disqualify as a good argument any argument in which it appears.

It should perhaps be pointed out that sometimes a compromise may be the only practical way to resolve some difficult situations. For example, a compromise may prevent continued economic deprivation, bloodshed, or mental anguish. Even though it is *not* a fallacy to compromise in order to settle such disputes, it *is* a fallacy to conclude that a compromise solution is the most defensible one simply because it is the compromise solution.

EXAMPLE Suppose that Ray is looking for a used refrigerator for his apartment and he finds one that seems to be the right size at a used-furniture store. The seller wants \$300 for it, and Ray offers \$200. Because the two of them are far apart on the price, Ray suggests “splitting the difference” at \$250.

A standard-form reconstruction will show the unwarranted assumption involved in Ray’s argument:

Since you want \$300 for the used refrigerator, (premise)
 and I am willing to pay only \$200 for it, (premise)
 [and the middle position is always the right or best position,] (implicit premise)
 Therefore, the right or best price would be \$250. (conclusion)

Although such a compromise may seem fair to Ray, it may not be the most just solution to the problem. On the one hand, it is possible that the seller already has \$250 invested in the refrigerator and needs to make some profit. On the other hand, it is possible that it may not even be worth \$250 in the used-appliance market. Thus, Ray’s original offer of \$200 may have been a very fair one. In any case, the third implicit premise represents an unwarranted assumption, which renders the premise unacceptable, and hence the argument is a bad one.

EXAMPLE “I have difficulty accepting the notion that all human events are the inevitable results of prior causes, but I also have difficulty with the view that human beings can act apart from prior causes in their experience. In other words, I find

both determinism and indeterminism untenable. Surely the most defensible view is somewhere between those extremes.”

This is the somewhat common dilemma that the introductory philosophy student encounters. The solution does not lie in finding a middle view between these extremes. Determinism and indeterminism are contradictories. Either it is the case that all events are determined, or it is not the case that all events are determined. There is no middle ground.

EXAMPLE Consider the following argument that is sometimes put forth regarding the Israeli-Palestinian conflict: “Both the Palestinian and Israeli points of view represent extremes. Therefore, some kind of compromise must be the best solution.” Compromise may be the only way that this dispute can be finally settled, but it is a different thing to say that a compromise is the best solution in that conflict.

ATTACKING THE FALLACY If an arguer proposes a middle position with regard to an issue, insist that the position proposed stand on its own merit. Charge the arguer with the task of trying to justify his or her position in the good ol’ fashioned way—without reference to its middle status. Even if, for practical reasons, you end up accepting a compromise position in order to settle an issue, you will want to make it clear to your opponent that the compromise position is not necessarily the most defensible or just position. You are not being a bad sport; you are being a good thinker, since the best position is the one that is supported by the best argument.

If your direct attack upon the fallacy of the mean is unsuccessful, you can always try an absurd counterexample. Ask your opponent whether the best way to behave in the voting booth would be to take the middle position and divide your vote evenly among all the political parties on the ballot. One could reliably predict that he or she would probably claim that some of the political parties did not “deserve” a share of his or her vote. Neither does your opponent’s conclusion based on his or her unwarranted assumption that the middle position is best deserve *your* vote.

FAULTY ANALOGY

DEFINITION *Assuming that because two things are alike in one or more respects, they necessarily are alike in some other important respect, while failing to recognize the insignificance of their similarities and/or the significance of their dissimilarities.*

One who argues by analogy usually compares a thing about which there is some dispute with another thing that may be less controversial, and argues that because they are similar in certain respects, it is reasonable to conclude that they may be similar in some other important respect that is relevant to the question at issue. Suppose that the disputed issue is whether an employee who leaves work early, comes in late, takes extra long coffee and lunch breaks, and takes ink cartridges for a home printer is doing anything that is morally wrong. To make a case for the immorality of such action, one might argue that such behavior is no different from stealing money from the company vault, which is obviously wrong. To

produce a good analogical argument that the behavior at issue is also wrong, the arguer would want to point out as many important and relevant *similarities* as possible between the compared cases and to show that there are no important and relevant *dissimilarities* between them. However, a good analogical argument must do more than point out similarities and lack of dissimilarities. Evidence should be presented to show how the compared cases are alike in the significant way that is relevant to the claim at issue.

One who commits the fallacy of faulty analogy simply makes the unwarranted assumption that things that are similar in some ways are necessarily similar in other ways and draws a questionable conclusion from the compared cases about one of those cases. The compared cases may be alike only in trivial or superficial ways and quite different in important ways, that is, in ways that are relevant to the issue at stake in the argument. In any case, if *no important similarities* are found, if *some important dissimilarities* are found, or both, the analogy is clearly a faulty one and fails to qualify as an acceptable premise in support of the argument's conclusion. Even if the premises of an analogical argument accurately identified important similarities and found few, if any, dissimilarities, there could still be a problem with the use of analogy. Because analogies are by nature usually only *suggestive*, even a good analogy is rarely forceful enough to make a strong case. The arguer should therefore be prepared to offer other evidence for the claim in question.

EXAMPLE

PROFESSOR GROSSMAN: “If one were to listen to only one kind of music or eat only one kind of food, it would soon become boring or tasteless. Variety makes eating and listening exciting and enriching experiences. So it seems to me that an exclusive sexual relationship with only one partner for the rest of one's life—that is, marriage—does not hold out much hope for very much excitement or enrichment.”

If we were to convert Professor Grossman's analogy into standard form, the unwarranted assumption will be clearly revealed:

Since eating the same food and listening to the same music all the time would soon make those experiences become boring, (premise)

and since variety makes those experiences more exciting and enriching, (premise)

[and since we wish for similar excitement and enrichment in sexual relationships,] (implicit premise)

[and in compared cases things that are alike in some respects are alike in other respects,] (implicit premise)

Therefore, variety in one's sexual relationships, rather than the limitation of sexual experience to a single marital partner, would make those experiences more exciting and enjoyable. (conclusion)

Although Professor Grossman's argument might have some initial force, in order for it to be a strong argument, he will have to show that the compared cases are alike in significant ways. More specifically, he will have to show that an exclusive sexual relationship is not essentially different from an unchanging food diet or an

unchanging musical diet. Since human relationships are so complex and full of a variety of possibilities, however, there is some doubt as to whether Professor Grossman will be successful in convincing others that the disadvantages of narrow diets of food and music can be extended to exclusive sexual relationships.

EXAMPLE Suppose someone defended open-textbook examinations with the following argument: “No one objects to a psychiatrist’s looking up information in the DSM (*Diagnostic and Statistical Manual of Mental Disorders*) to help him or her make a difficult diagnosis. Why, then, shouldn’t students taking a difficult examination be permitted to use their textbooks?”

There is very little similarity between these compared cases. The only thing that seems at all similar is the act of looking inside a book for some assistance in solving a problem. But there the alleged similarity stops. Very different purposes are served by the two acts in question. One is specifically designed to test a person’s knowledge; the other functions as a means of helping the psychiatrist diagnose or confirm a diagnosis of a patient’s problem. The psychiatrist’s basic knowledge has already been tested by virtue of his or her status as a licensed psychiatrist.

EXAMPLE “Smoking cigarettes is just like ingesting arsenic into your system. Both have been shown to be causally related to death. So if you wouldn’t want to take a spoonful of arsenic, I would think that you wouldn’t want to continue smoking.”

Although it is true that both the ingestion of arsenic and the smoking of cigarettes have been shown to be causally related to death, there are some significant differences in the character of those causal relations. A single heavy dose of arsenic poisoning will bring about immediate death, whereas the heavy smoking of cigarettes would be likely to bring about premature death only as a result of a long process of deterioration or disease. In one case, then, death is immediate and certain; in the other, death is statistically neither immediate nor certain. Thus, the analogy is a faulty one.

ATTACKING THE FALLACY One of the most effective ways of blunting the force of a faulty analogy is to formulate a counteranalogy that allows you to draw a conclusion in direct contradiction to that of the arguer. For example, you could respond to Professor Grossman’s argument about narrow diets in food and music with the following analogy: “Just as one might want to maintain throughout one’s life that sense of comfort and good feeling experienced with those dependable things that are enjoyable and familiar, such as one’s relationship to a son, daughter, or lifelong friend, so it is that the dependable, enjoyable relationship with one’s life partner, with whom one feels comfortable and toward whom one has good feelings, is something to be cherished and maintained throughout one’s life.” This counteranalogy may also be flawed, but it would at least suggest that there is an inconclusiveness in Professor Grossman’s analogical argument.

If you are not able to come up with an effective counteranalogy when confronted by a particularly bad analogy, simply point out that since the two compared cases resemble each other only in unimportant or trivial ways, no inference should be drawn concerning the claim at issue. In no case should you allow a clever

user of analogies to think that simply pointing out interesting similarities between cases qualifies as acceptable evidence for a claim about *one* of them.

ASSIGNMENTS

B. Unwarranted Assumption Fallacies For each of the following arguments, (1) identify the type of unwarranted assumption fallacy illustrated, and (2) explain how the reasoning violates the acceptability criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. People who have to have a cup of coffee every morning before they can function have no less a problem than alcoholics who have to have their alcohol each day to sustain them.
- *2. If a state trooper is justified in using an unmarked car in order to catch speeders, and if there is nothing wrong with deceiving a friend about his or her surprise birthday, then how can you say that “deception is morally wrong.”
- 3. No one dislikes me enough to slash my tires. I’m sure of it. It must have been an act of random violence or a case of mistaken identity.
- *4. I don’t see why you have criticized this novel as implausible. There isn’t a single incident in it that couldn’t have happened.
- *5. Anyone who eats meat tacitly condones the killing of animals. We might just as well condone the killing of human beings, for how do we draw the line between one form of animal life and another?
- *6. The University of Virginia is one of the best universities in this country, so it must have an outstanding philosophy department. Why don’t you apply to do graduate work in philosophy there?
- *7. The way I see it, we must either spend enough money on our football program to make us competitive with some of the better teams in this region or simply drop the program altogether.
- *8. **MAXINE:** Give me some time to think about it, Gene. Whether to have sex with someone is a very important decision. I want to try to make a rational decision about this.
GENE: Look, Maxine! Having sex with someone isn’t something people make rational decisions about.
- *9. No one can prove the existence of God. You simply have to believe that he is and accept him into your life, and he will be real to you.
- *10. **JUDGE:** I have heard contradictory testimony from the two principal witnesses in this case. I can only conclude that the truth must lie somewhere in between.
- 11. I am quite confident that the Board of Trustees will exercise superior judgment and skill in handling the affairs of this institution. After all, each of the members of the board has demonstrated superior judgment and skill in handling his or her own personal and business affairs.
- 12. Some students want our single-sex residence halls to be completely open to members of the opposite sex, twenty-four hours a day. Others want a closed-dorm policy, that is, one that makes the dorms off-limits to any member of the opposite sex, any time. Wouldn’t the best solution be to have the dorms open about twelve hours a day, perhaps from noon to midnight?

13. Because the Democratic Party supports a program of national health insurance, I assume that our Democratic representative, Congressman Boucher, supports such a program.
14. Because human bodies become less active as they grow older, and because they eventually die, it is reasonable to expect that political bodies will become less and less active the longer they are in existence, and that they, too, will eventually die.
15. **FARMER TO SON:** Son, if you pick up that newborn calf over there once every day, your muscles should develop to the point that you would be able to lift it when it's a full-grown cow. The calf will gain just a tiny bit of weight each day, and that little bit of weight can't make any significant difference in your ability to lift it. If you can do it one day, you should be able to do it the next day.
16. **RESORT MANAGER:** I'm sorry, but you can't bring that dog in here. We have a rule against any animals here.
MARK: But he's my wife's guide dog; she's blind.
RESORT MANAGER: I'm sorry, but we have to enforce the rule or we would have a whole menagerie here.
17. Did you vote for Bush for president because he is a Republican or because of his stand on stem cell research?
18. But, officer, you shouldn't give me a parking ticket for parking here! People park here all the time and never get tickets. I myself have been parking here for several months. No one pays any attention to the "No Parking" sign in this alley.

C. For each of the following arguments (1) identify, from among all the fallacies studied in this chapter, the fallacy illustrated, and (2) explain how the reasoning violates the acceptability criterion. There are two examples of each of the fallacies discussed in this chapter.

1. Can you believe that Joel got an A on his history test last week? I also heard that Margaret, who sits directly in front of him, got an A too.
2. *Man* has always been used as a generic pronoun. There's no reason that we should change it now.
3. I think that the government has no choice but to support welfare programs. The Constitution is very clear on this issue. It says that the government has the responsibility to do those things that promote the general welfare.
4. No, I don't believe you. Bobbie wouldn't do that to me. She loves me; she wouldn't be unfaithful. If she has been cheating on me, as you say, it would destroy a beautiful relationship. She's my whole life, Chad. She just wouldn't treat me like that.
5. We do not advocate censorship. We are simply protecting students from reading material that is morally objectionable.
6. The phone keeps ringing and ringing. Dianna must be either asleep or not at home.
7. We told you to be home at a reasonable hour, Betty, and you come dragging in here at midnight. We thought you could be trusted, but I guess we were wrong.
8. **EDDIE:** I don't understand why I have to give you my parents' name and address just to get a phone line put in my apartment.

TELEPHONE REPRESENTATIVE: You're a student, aren't you? We have to have parental information on all students. That's company policy.

EDDIE: But I'm a forty-three-year-old graduate student!

TELEPHONE REPRESENTATIVE: A rule is a rule.

9. **PATRICK:** The changes in the Senate environment bill introduced by the Republicans have improved the bill considerably.
WORTH: Well, it's good to see that the Democrats are cleaning up the opposition's bad legislation.
10. **LAWYER TO JUDGE:** Since women are generally more nurturing than men, and since a young child needs a nurturing parent, I think that you should award custody to my client, Ms. Powers.
11. As a defense for his act of cheating on his wife, because she cheated on him, Robert says, "Well, you know what Jesus said, 'An eye for an eye!'"
12. Some people think that there should be no restrictions on gays in the military. Others think that no gays at all should be allowed to serve in the armed forces. The best solution, I suppose, would be to meet halfway and institute a policy of "Don't ask, don't tell."
13. I know that the sign says that the safe speed for these curves is twenty-five miles per hour, but if twenty-five miles per hour is safe, then thirty miles per hour shouldn't give me any problem. After all, there's not a whole lot of difference between twenty-five and thirty miles per hour.
14. Gerald is very attractive and so is Debbie. They should have beautiful children together.
15. People who buy stocks are no different from people who bet on horse racing. They both risk their money with little real chance of making a big profit.
16. **JAMIE:** Jed, you seem to have been very irritable lately. Is there anything wrong?
JED: So you think that *you're* not irritable!
17. **DEBRA:** I just don't understand what could have happened to the \$50 that I had in my desk drawer.
JEANNIE: Why don't you ask Benita? She's been out shopping all day. She just came back with a whole bunch of new stuff.
18. Nobody keeps to the sixty-five-mile-per-hour speed limit. Most everybody drives at least seventy. The speed limit really ought to be raised five miles per hour.
19. **XANDER:** I just drove the new Mazda. You know, these Japanese cars are great cars.
VICTORIA: I don't know why you're putting down American cars. Some excellent cars are built in America.
20. Ralph, we've been friends for a long time, but we have really never talked much about politics. What are you? A Democrat or a Republican?
21. An impartial arbitration committee should not take sides when settling a dispute. But the so-called impartial committee that was supposed to arbitrate the issue between the students and the administration decided in favor of the administration and suspended the students. So how can they claim to have been impartial?
22. My father is in intensive care. His prognosis is very bad, but he'll pull through this cancer. He's tough as nails. He'll be out cutting the grass again in just a couple of months.

23. I didn't have a date with Angie last night. I just took her to dinner and a movie.
24. The biology department at the University of Virginia has been given national recognition as an outstanding department because of the quality of its teaching. One of its recent graduates has applied for our opening in biology here. I think we should hire her immediately. How could we go wrong?
25. **NAOMI:** Thanks for the invitation to join your church, Paul, but I'm not really a very religious person.
PAUL: Really? I've known you for several years, but it never occurred to me that you were an atheist.
26. **BAR HOSTESS:** May I see your driver's license, please?
GRACE: I don't have one. I don't drive, but I have my passport. Do you want to see it?
BAR HOSTESS: I'm sorry, but you can't order any drinks unless we see your driver's license.
27. **BARRY:** My wife wouldn't go into the grocery store with her sister because she hasn't washed her hair for more than a week.
DENISE: Your wife could have left her sister in the car, couldn't she?
28. I know that Presbyterians and Methodists disagree about a number of church and theological issues. But I see no reason why they can't join together into a single denomination. Since neither side has the full truth on its side, each group will just have to give a little in order to reach the best understanding of those matters.
29. **HERB:** Tim's *older* daughter, Laura, is very bright.
GEORGE: That often happens, you know. Parents don't spend as much time reading or talking with a second or third child. And they don't turn out as bright as a first child.
30. Teresa and Mark are getting married? They are two of the most unhappy people I know. There's no way that can be a happy marriage.
31. I don't think it makes any difference who is elected president. This country is like a machine. No matter who operates it, it will behave in essentially the same way.
32. I'm still angry that the bouncer wouldn't let me into the club last night. After all, I'll turn twenty-one in just two weeks. It seems to me that they could have let me in. It's not as if I were, like, eighteen or nineteen or something.

D. Submit an argument that you have read or heard within the past week that defends a position on a current controversial social, political, moral, religious, or aesthetic issue. Photocopy or reconstruct the argument from its source and tape it on a separate page from your typewritten analysis of it. In your analysis, reconstruct the argument in standard form and then evaluate it in terms of the five criteria of a good argument. Point out any named fallacies that violate the structural criterion, the relevance criterion, and/or the acceptability criterion. Then set forth the best argument possible for the most defensible position on the issue.

E. Use a 3-by-5 card to submit an *original* example (found or created) of each of the fallacies that violate the acceptability criterion and then create your own strategies for attacking each of them.

F. At the end of the last chapter you were asked to identify each of the fallacies that violate the relevance criterion committed by Dad in his second email to Jim. In this third of five emails, Dad commits each of the sixteen fallacies that violate the acceptability criterion discussed in this chapter. Each of the fallacies is committed only one time, and each number represents the presence of a named fallacy immediately preceding it. Identify by name each of the fallacies committed.

Dear Jim,

You assured me in your last email that your philosophy course hasn't caused you to give up any of your moral beliefs. I assume, then, that you *have* given up some of your religious beliefs. (1) I find this very disturbing. I obviously failed to convince you by my earlier email about the nature of faith.

Let's review a bit. As I discussed in my first email, philosophers think that reason should apply to all things, including religion. So I'm sure that your philosophy instructor believes that also. (2) But I say that you just have to accept God on faith. That's just the way it is with religion. (3) And real faith can't be half-hearted or lukewarm, Jim. That's like being "somewhat" pregnant. A woman is either pregnant or she isn't; hence, a person either has faith or doesn't have faith. (4) Anything less than total faith is no faith at all. It's all or nothing! (5)

I'm not saying, of course, that faith should be totally divorced from rational thought. In order to prevent people from believing something that might be totally absurd, it's appropriate to use reason about the things that one accepts on faith, but you don't need to go overboard about it—like the philosophers do. The best way to treat it would be to see reason and faith meeting each other halfway. (6)

Philosophers, by the way, are either hypocritical about faith or simply contradict themselves, for they, too, rest their views on their "faith" in science. They just prefer their faith to mine. (7) The philosopher's faith says that you have to have reason to believe something. But people of faith shouldn't give in a single bit to such a demand, because once you start trying to support faith with reason, there's no way to suddenly stop doing so, so you end up totally capitulating to their kind of faith. (8) So it's better to stay out of the fray altogether. If you accept the principle that faith is self-authenticating and therefore needs no evidence to support it, any use of evidence at all is a rejection of that principle. (9)

As you can tell, I have a very dim view of those who call themselves philosophers. They conceive of themselves as much more profound than they actually are. For example, I would be willing to bet that not a single point that your professor makes in his criticism of belief in God is a conclusive or knockdown argument. Therefore, you should regard his whole argument as inconclusive or inadequate. (10) Philosophers, of course, will try to trick you by claiming that one can be both a Christian and a philosopher, but you know what Jesus said: "No man can serve two masters." (11) I tell you that philosophers will say or do almost anything. I'm sorry, but I just don't trust them in any way. And I mean *in any way*. In fact, if I were you, I would never be alone with one of them. You should make sure that there is always someone else in the room. (12)

As I have said before, people of faith just have to listen to what the Bible says, and I mean what it actually says, not somebody's interpretation of what it says. (13) The simple truth is that God asks us to trust in Him, and I do. That means that He will keep us from harm, answer our prayers, and make sure that we will have a happy and satisfying life. (14) And there is little question that an eternal paradise is waiting for us at death. Why else would so many people want it? (15)

I'm very much looking forward to talking to you more about these matters while you're here during the Christmas holidays. As you might suspect, I love talking about these things more than your mother. (16)

Love,
Dad

G. Assume the role of Jim and write an email to Dad that responds to or attacks his poor reasoning in one of the paragraphs of the email above. However, try to attack each fallacy committed without using the actual *name* of the fallacy. Use the skills you have learned from the “Attacking the Fallacy” sections throughout the text to make your case.

FALLACIES THAT VIOLATE THE SUFFICIENCY CRITERION

This chapter should help you to:

Define or describe in your own words the essential features of each of the named fallacies that violate the sufficiency criterion of a good argument.

Recognize, name, and explain the faulty pattern of reasoning in each of these fallacies when it is encountered in ordinary discourse or discussion.

Make use of effective strategies for attacking or helping others to correct their faulty reasoning when they commit any of these fallacies.

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.

The fallacies discussed in this chapter are particular ways in which insufficient evidence can cause an argument to go wrong. Some arguments use too little evidence or no evidence at all; others use biased evidence or only the appearance of evidence; still others omit key or crucial evidence from the mix. Arguments that commit so-called causal fallacies draw conclusions about causal relationships that are not sufficiently supported by appropriate evidence.

Each of these patterns of reasoning is a way in which an argument may violate the sufficiency criterion of a good argument by failing to provide sufficient grounds for its conclusion. If the premises are not sufficient in number, kind, and weight, they may not be strong enough to establish the truth of the conclusion.

The fallacies that violate the sufficiency criterion are divided into two groups: (1) the fallacies of missing evidence, and (2) causal fallacies.

FALLACIES OF MISSING EVIDENCE

A study of actual arguments reveals that many utilize little or no evidence. The most common fallacy of missing evidence is not one of our sixty named fallacies because it is so obvious that it requires no explanation. Nevertheless, we feel obligated to call attention to it. It might be called the *fallacy of inference from a name or description*, and it is the kind of fallacy that advertisers and public relations experts hope you will commit over and over again. It is committed when descriptive or identifying words or phrases attached to people or things are regarded as constituting sufficient reason for drawing conclusions about those objects. If one infers that a product is the “economy size” based on nothing more than the fact that its package *says* it is the economy size, or if one concludes that a particular college is the best college in the South simply because the college’s catalog states that it is, one has come to a conclusion based on no evidence at all. This fallacy is so lacking in subtlety that little more need be said about it other than to point out that it is probably the most frequently committed of all fallacies, despite this lack of subtlety.

The more interesting and somewhat more subtle types of missing-evidence arguments are discussed below. The first are those of drawing a conclusion from either too small a sample (*insufficient sample*) or from data that are unrepresentative (*unrepresentative data*). The most interesting and thoroughgoing case of missing evidence is the argument that tries to make a case for a particular claim because of the lack of evidence against it, without regard to whether there is evidence in its favor (*arguing from ignorance*). Other missing-evidence fallacies make factual claims on the basis of what might have been or what might be (*contrary-to-fact hypothesis*), use clichés and aphorisms in place of evidence (*fallacy of popular wisdom*), or plead for one to be treated as an exception to a rule or principle without providing any reason for doing so (*special pleading*). Finally, there is the kind of argument that inexplicably omits the key evidence needed to make its case (*omission of key evidence*).

INSUFFICIENT SAMPLE

DEFINITION *Drawing a conclusion or generalization from too small a sample of cases.*

The evidence used in a case of insufficient sample is usually acceptable and relevant, but there is not enough of it to establish the conclusion of the argument. This fallacy is sometimes called a *hasty generalization* because an arguer has been too quick to draw a conclusion, given the skimpiness of the evidence. It is not uncommon for an arguer to draw a conclusion or generalization based on a single piece of supporting evidence or even a personal anecdote, a move that might be described as committing the *fallacy of the lonely fact*.

It is sometimes difficult to determine just what constitutes a “sufficient” number of instances for drawing any particular conclusion. The sufficiency of a sample is

partially determined by each context of inquiry, but it should not be assumed that an increase in the number of instances means that the claim for which they are evidence will be more reliable. There is a point beyond which the increase in the number of instances has a negligible effect on the sufficiency of evidence.

Some areas of inquiry have quite sophisticated guidelines for determining the sufficiency of a sample, such as in voter preference samples or television viewing samples. In most areas, however, there are no such guidelines to assist us in determining what would be sufficient grounds for the truth of a particular conclusion.

EXAMPLE “Vitamin C really works. Every member of my family used to have at least one winter cold every year. Last fall each of us started taking one thousand milligrams of vitamin C a day, and there hasn’t been even a sniffle at our house in more than nine months.” If we reconstruct this argument in standard form, we have the following:

Since each member of my family for nine months has been taking one thousand milligrams of vitamin C daily, (premise)
 and during that period we have had no colds, (premise)
 and during the previous cold season, we each had at least one cold, (premise)
 [and the sample of one family is a sufficient sample to determine what is true for all people,] (implicit premise)
 Therefore, a vitamin C therapy of one thousand milligrams daily will prevent the common cold. (conclusion)

Such data may be interesting enough to encourage some people to consider experimenting with vitamin C therapy, but the argument hardly makes the case for the program’s effectiveness. The claim made in the implicit fourth premise about the sufficiency of a sample limited to one homogeneous family is highly questionable and would not justify drawing any conclusion about the cold-preventing effects of daily megadoses of vitamin C. It is quite possible that a number of other factors could account for the no-cold phenomenon in the arguer’s family during that particular nine-month period.

EXAMPLE It is not unusual to pick up a few items at a grocery store other than the one at which we normally shop and discover that the prices on those few items are lower than the prices on the same items at our regular store. In such a situation we might infer that we should switch grocery stores in order to save on our monthly grocery bill. If we had found the prices on those few items to be higher, we might have inferred that we should stick with our regular store. However, neither inference would be warranted because the samples used are too small. Only the results of a more comprehensive comparative survey of the prices on all the items we typically buy during the month could possibly justify a conclusion about where to shop.

EXAMPLE “My experience with my ex-wife was such a bad one that I have no intention of ever marrying again. In fact, I wouldn’t recommend marriage to anyone.” This reasoning is obviously based on a very small sample. This man’s one experience with marriage apparently convinced him that marriage was not a

worthwhile institution for him, his friends, and probably everyone else. It is quite possible, however, that his one negative experience with marriage could be attributed to his own flaws or to those of his wife, rather than to flaws in the institution of marriage. It can at least be said that the conclusion concerning the value of marriage deserves a larger sample.

ATTACKING THE FALLACY Those who present you with an argument based on a single case or an insufficient sample are usually quite convinced of the truth of their claim. Perhaps the reason that it seems so convincing to them is that it often comes out of a significant personal experience. You should, however, find some way to make it clear that a personal insight falls far short of being a good argument.

It is possible, in some cases, that what appears to be a one-instance generalization may not be intended as an argument at all; it may simply be the expression of an opinion, accompanied by an illustration. To clarify the matter, you might ask, “Are you just expressing an opinion, or are you presenting an argument?”

If the arguer denies that he or she is just expressing an opinion, a reconstruction of his or her argument may be helpful. A reconstruction of the argument, spelling out the implicit premise that is being used—namely, that one or a few cases constitute sufficient grounds for drawing a conclusion about all cases—should clearly demonstrate to the arguer the flawed character of the argument. If it doesn’t, an absurd counterexample might: “Faculty kids are real brats. I babysat with one the other night, and he was spoiled, rude, and uncontrollable.” If necessary, put the argument into standard form:

Since the faculty child I babysat for recently was a brat, (premise)

[and one faculty child is a sufficient sample of faculty children to determine what is true of all faculty children,] (implicit premise)

Therefore, all faculty children are brats. (conclusion)

It is highly unlikely that your opponent could embrace, without embarrassment, the second premise, once it is spelled out; therefore, he or she could not continue to hold to a similar premise in his or her own argument.

UNREPRESENTATIVE DATA

DEFINITION *Drawing a conclusion based on data from an unrepresentative or biased sample.*

Unrepresentative data are data that are not proportionately drawn from all relevant subclasses. For example, if one wished to generalize about the opinion of the American people on a particular issue, it would be necessary to consider data proportionately drawn from subclasses based on race, age, educational status, sex, geographical area, and perhaps even religion and political affiliation. In most cases, data from other subclasses, such as body weight and hair color, would not be relevant.

It is also important to avoid using data that may be biased. This can occur in at least three ways. First, the data collected may be tainted by virtue of the bias of the

gatherer. Opinion data gathered by a political party or by an advocacy group should be immediately suspect. Second, data purporting to support claims about any matter are biased if collected from only one or a few subgroups of the target population, especially if data are collected from groups that might have strong positive or negative opinions about the matter at issue. For example, if one were interested in assessing campus opinions about college athletics, one should not survey just members of intercollegiate athletic teams. Neither should one survey just non-athletes. If you were interested in the quality of a recent film release, you should not form a judgment exclusively on the basis of evaluations collected from readers of a single magazine, since its subscribers are a subgroup with special interests and tastes. Third, you should not give much credence to the call-in or email polls frequently taken by networks, newspapers, and magazines these days. If you want to know what “the American people” think about a particular issue, go find a reputable poll that is based on the careful surveying of representative groups.

Another kind of unrepresentative data might be data of differing quality. If one compared statistics gathered with modern techniques of statistical reporting and analysis with statistics gathered under very different methodological and technical conditions, almost any conclusion would be highly questionable. For example, if one were to compare statistics on the number of violent crimes committed in the United States in 2007 with statistics about similar phenomena in 1947, the comparative conclusion would be quite suspect.

EXAMPLE “It has been concluded from a recent study involving more than one hundred thousand people in the state of Florida that 43 percent of the American people now spend at least two hours a day in some form of recreational activity.” A reconstruction of this argument in standard form clearly reveals the statistical flaw:

Since 43 percent of Florida residents spend at least two hours a day in some form of recreational activity, (premise)

[and the people of Florida are representative of all other Americans,] (implicit premise)

Therefore, 43 percent of all Americans spend at least two hours a day in some form of recreational activity. (conclusion)

To draw such a conclusion about the leisure-time activities of all American people would not be warranted. The state of Florida is populated by a disproportionate number of retired and leisure-oriented people, so data based on a Florida population alone would be unrepresentative.

EXAMPLE “We had a mock election on campus today, and the Democratic candidate won. So I’m pretty confident that she will win the election in November, especially because more than two thousand students voted. That seems to be a big enough sample. Don’t you agree?”

A college population hardly qualifies as a representative sample of voters, even if the size of the sample is actually larger than the number usually polled by sophisticated polling organizations. If a sample is not drawn from relevant representative subclasses, its size is of no consequence.

EXAMPLE “A recent study of how Americans spend their vacations revealed that 52 percent of the people spend five or more days a year at ocean beaches.” This study was based on a sample of fifty thousand Virginians, drawn from every relevant subgroup of the population, but it is hardly representative. Most areas of Virginia are close to popular beaches within the state as well as in Maryland and North and South Carolina. For that reason, a disproportionate number of the residents of Virginia, when compared with people from many other states, vacation at the beach.

ATTACKING THE FALLACY Suggestions for responding to arguers who use unrepresentative data are similar to those for dealing with arguers who use too small a sample. If you encounter a case in which someone has used suspect data, you might expose the flawed statistical assumption by making it part of a similar argument with an absurd conclusion. For example:

Since most of the one thousand people in attendance at the county dog show own dogs, (premise)

[and what is true of the people at the dog show is true of the entire population,] (implicit premise)

Therefore, most people own dogs.(conclusion)

If the arguer sees nothing wrong with the second premise, no attack against unrepresentative data may turn out to be very successful, but you might try one other strategy. Threaten the arguer with the possibility of your gathering another set of data of the same size from people living in local nursing homes as support for a claim that most people do *not* own dogs. If samples of equal size can support two contradictory conclusions, it should be clear that something must be wrong with the representative quality of the data.

ARGUING FROM IGNORANCE

DEFINITION *Arguing for the truth (or falsity) of a claim because there is no evidence or proof to the contrary or because of the inability or refusal of an opponent to present convincing evidence to the contrary.*

Arguing from ignorance is a tactic many people use to defend some of their favorite beliefs. In the case of a positive belief, they simply point out that since a claim has not been *disproved*, it must be true. Or in the case of a negative claim, they argue that since the claim has not been *proved*, it is false. Those who argue in this way base their argument not on knowledge but on ignorance, a lack of knowledge. The principle of sufficiency, however, makes it clear that the absence of evidence *against* a claim does not constitute sufficient evidence *for* it and the lack of evidence *for* a claim does not constitute sufficient evidence *against* it.

Arguing from ignorance also violates the principle that the burden of proof for any claim generally rests on the person who sets forth the claim. For example, if an arguer claimed that “ghosts exist, unless you can prove that they don’t,” he or she is attempting to shift the burden of proof to another person, usually to someone

who is dubious about the claim. This is typically done by insisting that those who are unconvinced of the truth of the arguer's claim have the responsibility to disprove it or to provide support for the contradictory claim. If the doubters don't accept that responsibility, the arguer fallaciously assumes that no proof is needed for the claim at issue. But proof *is* needed. An argument that employs an appeal to the "evidence" of no evidence does not satisfy the sufficiency criterion of a good argument.

There are some situations of inquiry in which this kind of reasoning seems to be acceptable. In our judicial procedure, for example, a defendant is assumed to be innocent unless proven guilty. But this is not a case of arguing from ignorance. The principle of *innocent until proven guilty* is a highly technical judicial construct that actually means *not proven guilty*. It does not mean that the person is innocent; it simply means that a defendant is not deemed to be guilty unless he or she *is* proven guilty.

The fallacy of arguing from ignorance probably gains some of its deceptive appearance as a good argument from its similarity to a legitimate way of arguing. For example, suppose that I claimed that there were termites in my house. If a professional termite inspection revealed no evidence to support the claim, however, it would then be justifiable for me to conclude that there are no termites in the house. This sounds like a case of arguing from ignorance because the lack of evidence *for* a claim ("there are termites") is used as evidence that the claim is false ("there are no termites"), but there is a crucial difference in this case. The negative claim is based not on a lack of evidence, but on a thorough assessment of *all* of the positive and negative evidence relevant to the question of whether there are termites in the house.

EXAMPLE "What's all this business about equal pay for women? The women who work in my office must be satisfied with their salaries, because not one of them has ever complained or asked for a raise." A reconstruction of this argument in standard form will clearly reveal the faulty implicit premise:

Since the women in my office do not complain about receiving less pay than their male counterparts, (premise)

[and where there is no expression of dissatisfaction, there is no dissatisfaction,]
(implicit premise)

[because the lack of evidence against satisfaction is evidence for satisfaction,]
(implicit subpremise)

Therefore, the women in my office are quite satisfied with receiving less pay than the men in the office. (conclusion)

The arguer assumes that the situation of a group of people must be satisfactory simply because no complaints about that situation have been expressed. In other words, the absence of evidence *against* the satisfactory character of a situation is regarded as evidence *for* the satisfactory character of that situation. Making such an inference is so distinctive a form of the fallacy of arguing from ignorance that it is often given a separate name—the *fallacy of quietism*. But from the fact that a person or group is "quiet"—that is, makes no complaint—one could not infer that

there is nothing to complain about. There may indeed be many good reasons why the complaints are not openly voiced.

EXAMPLE “Since my opponent has not clearly indicated his *opposition* to the new federal gun-control bill, he obviously is *in favor* of it.” The only “evidence” offered in support of such a claim is the fact that the opponent has not addressed the issue. Interestingly, the arguer could have defended the opposite claim with the same evidence: “Since my opponent has not clearly indicated his *support* for the new federal gun-control bill, he obviously is *opposed* to it.” Any evidence that could lead to either a positive or negative conclusion with equal strength cannot be sufficient grounds for *one* of the conclusions.

EXAMPLE “I didn’t see any ‘No Trespassing’ sign, so I assumed that it was alright to walk through the field.” The fact that there is no sign indicating that an act is *not* permissible does not entitle one to assume that the act *is* permissible.

EXAMPLE

CONNIE: Did you get that teaching job at the University of North Carolina at Chapel Hill?

DOT: No. I sent in my application more than two months ago, and I never heard a word from them.

Dot is assuming that the university has rejected her job application because there is no evidence that she has been accepted. However, she could have just as easily argued from ignorance for the opposite claim—that she has been accepted because there is no evidence that she has been rejected. Neither inference should be drawn, however, because it would be inappropriate to conclude anything on the basis of no communication from the university, especially in view of the fact that the institutional procedure required for filling a teaching position is usually a very long and complex one.

ATTACKING THE FALLACY If the absence of proof against a claim could be regarded as proof that it is true, then even the most bizarre of claims could be construed as true. Moreover, if a claim were so absurd or trivial that others never bothered to address it, a defender of such a claim would always win by default.

If an arguer makes what you consider to be a highly questionable claim and supports it by pointing out the lack of evidence against it, try playing the same game. You could demonstrate the faulty character of that kind of reasoning by making the opposite of the arguer’s claim and supporting it with the same method that he or she used. For example, suppose that someone claims that because psychokinesis has not been proved false, it must be true. You could then argue that because psychokinesis has not been proved true, it must be false. Your opponent should then be able to see that such reasoning would lead to the contradictory conclusion that psychokinesis is both true and false.

CONTRARY-TO-FACT HYPOTHESIS

DEFINITION *Treating a hypothetical claim as if it were a statement of fact by making a claim, without sufficient evidence, about what would have happened in the past if other conditions had been present or about an event that will occur in the future.*

Because empirical evidence for claims about nonexistent events is obviously not available, any alleged “evidence” should be treated as part of an imaginative construct. Even though there is usually no way of knowing what might have been the consequences of an event that did not occur or what may be the consequences of an event that has not yet occurred, it is sometimes possible to develop hypothetical constructs about such events. These constructs are helpful in understanding the past and in planning for, or avoiding undesirable consequences in, the future. However, it must always be kept in mind that such imaginative constructs are at best “likely stories,” and their speculative character must always be acknowledged.

This fallacy, insofar as it frequently refers to past “events,” is sometimes called *Monday morning quarterbacking*. Nearly every avid football fan is known to make claims about what would have happened in last weekend’s game if the quarterback had just called a different play or had executed the same play differently. But there is no way of knowing with any degree of certainty what would have happened in the past if something that did happen had not happened, or if something that did not happen had happened. The evidence for a claim that is *contrary to the facts* is simply not available. For this reason, the contrary-to-fact hypothesis violates the sufficiency criterion of a good argument because it draws a conclusion without sufficient grounds for doing so.

EXAMPLE Consider the following contrary-to-fact hypotheses, none of which is provided with any support: “If you had only tasted the stewed snails, you would have loved them”; “If I hadn’t goofed around my first year in college, I would have been accepted at medical school”; “If I had only been there for him last night, he wouldn’t have killed himself”; or “If only I had practiced a little more on my backhand, I could have won that tennis tournament.”

Even if there *were* reasons to accept such claims, we are rarely, if ever, *given* those reasons, and even if we were, there is still the question of whether they could be legitimately counted as “evidence.” Let us examine the last of these arguments more closely by converting it into standard form:

Since I did not win the tennis tournament, (premise)

and I had not practiced sufficiently on my backhand before the match,
(premise)

and my practiced backhand would make the difference between winning and losing, (premise)

Therefore, if I had practiced my backhand, I would have won the tournament.
(conclusion)

There is no way of knowing what would have been the outcome if the backhand had been practiced. The third premise is simply a claim for which no evidence is available. The most that might be said is that the player’s lack of practice on the

backhand might have contributed to a few missed or poorly executed backhand plays, but there is no way to know how that might have affected the outcome of the tennis tournament, given the complexity of the game.

EXAMPLE Consider the number of students who have convinced themselves or their parents of the wisdom of moving out of campus housing with something like the following argument: “If I could just live off campus, I could get a lot more studying done, my grades would improve, and I’m sure I would get a lot more sleep.” The student probably thinks that there are reasons to support these claims; yet it is doubtful that those reasons would qualify as evidence. The claims are therefore at best speculative.

EXAMPLE Most of us have witnessed the fallacy of the contrary-to-fact hypothesis in claims made about historical events: “If Hitler had not invaded Russia and opened up two ‘fronts,’ the Nazis would have won World War II” or “If the Democrats had won the election of 1860, then the War Between the States would never have erupted.” These are such highly speculative claims that it is difficult to imagine how sufficient “evidence” for such claims could ever be found.

ATTACKING THE FALLACY Because the formulation of imaginative constructs is a vital part of planning for the future and learning from the past, I would not encourage readers to attack every hypothetical construct or to refrain from exercising their own imagination. However, if you are confronted with a substantive contrary-to-fact claim that is highly questionable, I would suggest that you find some way of getting the arguer to recognize and to admit to the speculative character of the claim. Sometimes the very act of admitting that a claim is speculative will lead one to be more open to counterarguments and to take more seriously the task of supporting the claim.

One effective way of confronting an unsupported hypothetical claim might be something like this: “Well, you may be right, but I would have no way of determining that, for I can’t think of any evidence that you might find to support such a claim.” There is, of course, no “evidence” that is likely to be available, but the arguer will at least probably feel obligated to make some attempt to share with you the basis for his or her speculation about the claim, and that might get the discussion on a constructive track.

FALLACY OF POPULAR WISDOM

DEFINITION *Appealing to insights expressed in aphorisms or clichés, folk wisdom, or so-called common sense instead of to relevant evidence for a claim.*

This fallacy commonly takes the form of using a cliché or aphorism as a premise in an argument as if it were evidence and failing to show that the proposition expressed by the cliché is reliable. Because clichés, like analogies, are at best only suggestive, no argument wholly constituted by a cliché should be treated as a good one. If the cliché were accompanied by other premises that explained why the cliché or aphorism expressed an important and defensible insight, the cliché itself would add nothing to the argument; it would be, at best, only a clever way of expressing the premise.

The fact that many clichés or aphorisms seem to contradict one another is an additional reason for regarding a cliché as providing insufficient support for a claim. Look at the contradictory advice in the following pairs of aphorisms: (1) “Two heads are better than one” and “Too many cooks spoil the broth.” (2) “Where there’s smoke there’s fire” and “You can’t tell a book by its cover.” (3) “He who hesitates is lost” and “Fools rush in where angels fear to tread.” (4) “Better safe than sorry” and “Nothing ventured, nothing gained.” (5) “A new broom sweeps clean” and “Many a good tune is played on an old fiddle.” (6) “Where there’s a will, there’s a way” and “If wishes were horses, beggars would ride.” (7) “Birds of a feather flock together” and “Opposites attract.” Since aphorisms or clichés are expressions of so-called popular wisdom, and the “wisdom” expressed in many aphorisms can easily be contradicted by the “wisdom” expressed in others, there is no reason, apart from other evidence, to regard an aphorism as reliable support for any claim or course of action.

Another form of this fallacy is to appeal to the insights embedded in the folk wisdom that is perhaps passed on in the culture from generation to generation as if it were evidence for a claim. For example: “Feed a cold, starve a fever” or “An apple a day keeps the doctor away.” Such claims are highly questionable or misleading pieces of medical or nutritional advice, and the fact that such beliefs may be widely held constitutes no evidence for a particular claim.

A third form of this fallacy is the appeal to “common sense.” The notion of “common sense,” however, is usually undefined and bereft of any evidence. Even though an arguer may be able to produce some evidence upon request, he or she often seems to believe that such evidence does not need to be presented for a claim if it is named “common sense.” The phrase itself seems to take on an aura that is sufficient reason to cause some people to accept a claim in question, as in “it is just common sense to conclude that exercise is bad for your high blood pressure.”

EXAMPLE Suppose that a counselor tells a young woman that she can’t have a serious relationship with two different men at the same time. In an attempt to convince her, the counselor says, “You just can’t have your cake and eat it, too.” When this argument is seen in a standard form, the questionable premise looks almost absurd:

Since you have a continuing relationship with two different men, (premise)
and you cannot have your cake and eat it, too, (premise)

[Therefore, you must cut off one of the relationships.] (implicit conclusion)

The principle of charity drives us to articulate what is probably the argument’s implicit conclusion. But the obvious question is whether the aphorism is applicable in this particular instance. Having or keeping a piece of cake and consuming that same cake are obviously logically incompatible, but there is nothing logically incompatible about being in a serious relationship with two people at the same time. It certainly does not apply in the case of friendship or nonromantic relationships. To make the case, the counselor would have to demonstrate why the two are unworkable or practically incompatible. The cliché alone does not do the job.

EXAMPLE A typical campus cliché expressed by one student to another the night before an important test is, “Well, if you don’t know it now, you never will.” No evidence is usually given for such a questionable claim; indeed, there is considerable

evidence to suggest that the claim is false. As far as performance on tests is concerned, it is probably safe to say that a conscientious student might learn a significant amount of material during the hours immediately before a test.

EXAMPLE Suppose that a couple is discussing the question of whether they should use a recent inheritance to pay off a large mortgage on their house:

JACKIE: Now we can pay off our house loan.

TIM: No. I don't think so. I think it would be better to invest it in something that can pay a higher interest rate than we are now paying on our mortgage. That way we can come out ahead.

JACKIE: What? That's crazy! It's just common sense to pay off a mortgage if you have the money to do it.

In what way is it “just common sense”? Tim has presented Jackie with reasons that seemed to make *fiscal sense* to him and to most professional financial advisers. Can an action make *fiscal sense* and not make *common sense*? If so, to what does “common” refer? To call something “just common sense” does not necessarily mean that it actually makes sense. In the absence of any supporting evidence, the claim may well be an empty one.

ATTACKING THE FALLACY In no way should you be intimidated by the alleged wisdom of a popular cliché. A cliché, like any not-so-cleverly-expressed opinion, requires evidential support to make it worthy of acceptance. If an arguer attempts to use a cliché rather than evidence to support a claim, challenge it directly; or better yet, counter it, if possible, with a cliché that gives contradictory advice. The arguer would then have to show why his or her cliché is better than yours. And that effort will require the use of evidence.

You should also not let yourself be intimidated by appeals to folk wisdom or “just common sense.” There should be no embarrassment in simply asking, “What evidence leads you to believe that this bit of alleged popular wisdom is true?” It is also always appropriate to ask, “Just how is it ‘just common sense’?” The very fact that you are in a serious discussion with the arguer indicates that you are not prepared to accept a proposed claim as “just common sense.” If it were obvious that it was just common sense, you would probably not be having the discussion.

SPECIAL PLEADING

DEFINITION *Applying principles, rules, or criteria to another person while failing or refusing to apply them to oneself or to a situation that is of personal interest, without providing sufficient evidence to support such an exception.*

Special pleading occurs in a context in which it is assumed or understood that a rule, principle, or law applies to all people alike. The special pleader usually accepts the principle but wishes to make himself or herself or another an exception to it. What makes special pleading a fallacy that violates the criterion of sufficiency is the fact that no evidence is provided for making that exception. While special treatment may sometimes be called for, it is always the case that the action of treating differently what appear to be similar cases must be justified.

EXAMPLE Neel claims that he is too tired to share in the chores of cooking, cleaning, or caring for the children after working all day. If he claims that his wife should do those domestic jobs, even though she, too, is tired from her full-time job outside the home, he is engaged in special pleading. Let us look at this argument in standard form:

Since I work hard all day and am tired at the end of the day, (premise)
 and you work hard all day and are tired at the end of the day, (premise)
 [and the governing principle in such a situation is that each partner should share in the domestic chores,] (implicit premise)
 [and the principle applies to you but not to me,] (implicit premise)
 Therefore, you should do all the domestic chores. (conclusion)

Being tired from a full day's work outside the home presumably excuses Neel from domestic chores, while it apparently does not excuse his wife. He is applying a principle to his wife that he is not willing to apply to himself, and, as can be clearly seen, he has presented no evidence for making that exception.

EXAMPLE Sometimes we make a special case of ourselves through a subtle use of language: "I am confident, you are arrogant; I am aggressive, you are ruthless; I am thrifty, you are cheap; I am frank, you are rude; I am flexible, you are inconsistent; I am clever, you are conniving; I am thorough, you are picky; I am curious, you are nosy; I am excited, you are hysterical; I am firm, you are pig-headed; I am friendly, you are flirtatious; and I am a free spirit, you take license."

But if the behaviors in these cases are the same, how can we justify assessing our own behavior positively and another's negatively, without being inconsistent? When charged with inconsistency, special pleaders often respond with, "Well, this is different!" But if they cannot convincingly make the distinction stick, they are clearly guilty of special pleading.

EXAMPLE Jessie and Katrina are college roommates. Let us imagine them engaged in the following conversation:

JESSIE: Would you please turn off your music? I want to take a nap.

KATRINA: This is my room, too. I want to listen to this new CD I just got in the mail.

JESSIE: Listen to it some other time. I want to take a nap.

The principle that most roommates accept is that one's interest is not more important than the other's, but Jessie is implicitly claiming that her interest is more important than Katrina's. Most of us would probably agree that Jessie is engaged in special pleading because she gives no convincing reason why her interest should have a priority status. We are not saying that there is no way to resolve this or other similar issues; we are simply saying that in this particular exchange, Jessie is guilty of special pleading.

ATTACKING THE FALLACY An attack that is most effective is to accuse your special-pleading opponent of applying a double standard or being inconsistent. Each of

these charges is commonly understood outside logical circles and has strong negative connotations with which the arguer will not want to be associated. But you will need to explain carefully how you think the double standard has been employed and to scrutinize carefully any defense your opponent may make against the charge.

Some situations may call for making oneself a special case, but these are rare, so the careful thinker should always be suspicious of any preferential treatment claim. Ask the arguer to spell out the reasons why some people should be treated differently from others or why the principle should not apply in his or her particular case. The arguer, of course, will almost always have some kind of reason; the question is whether that reason is sufficient to support the preferential treatment desired. For the hard-to-convince, try an absurd counterexample:

Since the law with regard to the payment of income tax should be applied in all cases, (premise)

and I am an exception because my case is not like that of others, for I need that money for other things, (premise)

Therefore, the income tax law should not be applied to me. (conclusion)

The second premise should sound absurd to even the most inveterate special pleader, and the arguer should be prepared to show why the special treatment he or she is requesting is not equally absurd.

OMISSION OF KEY EVIDENCE

DEFINITION *Constructing an argument that fails to include key evidence that is critical to the support of the conclusion.*

The sufficiency criterion of a good argument is perhaps most clearly violated when crucial or key evidence that is necessary to support a particular conclusion is simply absent from the premises of an argument. It is not unlike the situation of preparing a mixed drink and leaving out the alcohol. The mistake that is made is not a failure to provide evidence that might make the argument a strong one; it is simply a failure to supply the evidence necessary to make the case *at all*. It is like the missing piece of a puzzle; without it, the argument will not be complete or work at all.

One of the most common ways of committing this fallacy is in conjunction with committing another fallacy. One cannot construct a good argument designed to support a moral judgment and leave out the most crucial part—the moral premise. A moral judgment that is not derived from a moral premise commits the is-ought fallacy, which was discussed in the previous chapter. Suppose that someone argued in the following way:

Since dating a friend's former boyfriend would be very likely to upset her, (premise)

and I don't want to upset her, (premise)

Therefore, it would be morally wrong to date him. (conclusion)

One might not want to upset a friend, and for that reason might not date her former boyfriend. However, the argument presented does not support the moral judgment that it would be *wrong* to do so. An argument that might support such a conclusion is one that included a general moral principle stated in the premises from which the particular moral judgment could be inferred.

EXAMPLE “Let’s get married, Melissa. We like the same things, we both love your dog, we go to the same church, we share the same tastes in food and movies, and we can save money on living expenses. So, what do you say, huh?” Let us look at this argument in standard form:

Since we like the same things, (premise)
 and we love your dog, (premise)
 and we go to the same church, (premise)
 and we share the same tastes in food and movies, (premise)
 and we could save money on living expenses, (premise)
 Therefore, we should get married. (conclusion)

The reasons given in the actual argument might support equally well a proposal to marry your sister or your best friend. What most people think are key issues to be considered in a marriage decision—whether they love each other and whether they want to spend the rest of their lives together—are completely omitted.

EXAMPLE Suppose you wanted to nominate a professor for “Teacher of the Year.” The reasons that you might give for why Professor Fields should receive the award are many: She is bright, she is widely published, she is dedicated to her job, she is always willing to talk to students, she is always kind and caring toward students, and she is excited about her discipline. These are all very good reasons for giving her an award, but the list does not mention what is surely the most important or key reason for such an award—her teaching ability. A successful case for giving her the award must include at least a positive answer to the question, “How good of a teacher is she?”

EXAMPLE “I think I will buy the car my neighbor is selling. He’s had it for a couple of years, and it seems to run just fine. I like the color and the style, and he tells me it gets real good gas mileage.” These may all be good reasons to buy the car, but one of the key premises in an argument for buying a car is whether the car is in the appropriate price range. And that information is missing.

ATTACKING THE FALLACY The best way to address this fallacy is to do so directly. Point out the evidence that you must have before you might be willing to embrace the conclusion. This is especially the case if the moral or aesthetic premise is missing from what is purported to be a value argument. It is quite possible that the omission is simply the result of the arguer’s carelessness and that it can be easily produced. In that case, the argument could perhaps be quickly made into a successful one.

It is possible, however, that the evidence was omitted for some other reason. For example, the arguer may not even be aware of the crucial nature of the missing

evidence. In such cases, the glaring omission must be pointed out to those who are obviously not blinded by its glare. But whatever may account for the missing key evidence, it must be made clear that the argument, as it stands, is not a good one.

ASSIGNMENTS

A. Fallacies of Missing Evidence For each of the following arguments, (1) identify the type of missing-evidence fallacy illustrated, and (2) explain how the reasoning violates the sufficiency criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. I know that my term paper is due today, Professor Raines, but would you please give me a two-week extension? You see, I've had a lot of work to do in my other classes, and I just haven't had time to start on the paper yet.
- *2. If you ever ate in our school cafeteria, you would see that institutional food is never very good.
3. A recent telephone survey of randomly selected people revealed that 75 percent of the American people watch at least one soap opera a day. Indeed, to ensure accuracy in the data, the way they conducted the study was to make the calls between 1:00 and 4:00 in the afternoon, and then ask what show, if any, the respondent was watching at the time.
4. **DAUGHTER:** But, Mother, Susan and I have been college roommates for three years, and we are best friends. Why won't you let me go to her beach house next month? I just don't understand.
MOTHER: Just remember, dear, that "Mother knows best."
- *5. This time-share deal looks like a good one. If I buy a time-share at this resort, I'll be guaranteed a vacation week every year at the same time at a place our family really likes to go. That way I won't have to deal every year with the problem of trying to find a place to rent on the beach.
- *6. If I just hadn't dropped out of college, I'd be working now rather than standing in this unemployment line.
7. **RUTH:** Jim, you said that you wanted to be free to date other women. I don't understand how you can get angry when I date other guys.
JIM: But every time I see you with someone else, it really hurts. Maybe it would be better if you didn't look like you were having such a good time. In fact, you look like you really like the guy. That can't be good for our relationship.
RUTH: But you date other women.
JIM: But you know that when I date other women, it's not serious. You know that you are the one I really care about.
- *8. The gays in this country must be happy with their situation now. There haven't been any protest marches or any loud voices of dissent for some time.
9. All three sex offenders arrested this month by the city police had previous records for the same crime. It seems that once a sex offender, always a sex offender.

10. Hey, look at this ad, Mary. They have a sale on selected paint at Bargain Hardware at half off the regular price. We said that we were going to paint our house this spring. Why don't we go get some of the paint while it lasts?
11. I'm sorry, Ms. Dobkins, but we cannot approve your loan application. We must assume that you don't have good credit because there's no record indicating that you have ever made any monthly installment or credit card payments.
12. If I had gone with him to the party, I could have kept him from making a fool of himself.
- *13. From a recent survey of a large number of representatively selected people in New York City, it has been discovered that less than 2 percent of Americans actually hunt for sport.
- *14. **MARSHA:** If that were a child of mine, I would have given him a good spanking rather than just sitting down and talking with him about his behavior as you did.
DAVID: Why do you think that your method is better?
MARSHA: I just think that "if you spare the rod, you spoil the child."

CAUSAL FALLACIES

Trying to understand the notion of cause has been a difficult philosophical problem for a long time, and this difficulty also underlies a number of problems in reasoning. A causal fallacy, more than any other type of fallacy, requires that we draw from the entire reservoir of our knowledge and understanding of the world. The more we know about the nature of complex causal relationships, the more likely we will be able to detect a faulty causal analysis.

The fallacies in this section represent various ways of inferring faulty causal explanations from premises that do not provide sufficient support for such explanations. Hence, the causal analysis is misapplied in particular situations. There may be a confusion between a necessary condition and a sufficient condition (*confusion of a necessary with a sufficient condition*), or the causal factors in a situation may be too few to account for the effect in question (*causal oversimplification*). Some faulty causal analyses claim that because something happened right after another event, it was caused by that earlier event (*post hoc fallacy*), while others confuse an effect with a cause (*confusion of cause and effect*) or fail to recognize that there may be a third or common cause that accounts for two events that were initially thought to be causally related (*neglect of a common cause*). Finally, faulty causal analyses may lead one to draw an unwarranted conclusion that a series of events leading to an inevitable end will follow from a single event (*domino fallacy*) or that it is possible to make predictions about a chance event based on the past performance of similar chance events (*gambler's fallacy*).

CONFUSION OF A NECESSARY WITH A SUFFICIENT CONDITION ⁷

DEFINITION *Assuming that a necessary condition of an event is also a sufficient one.*

A *necessary condition* of an event is a condition, or set of conditions, in the absence of which the event in question cannot occur. Even though a necessary condition of an event must be present in order for that event to occur, in most cases it alone is not sufficient to produce the event. A *sufficient condition* of an event is a condition, or set of conditions, in the presence of which the event in question will occur. That set of conditions would include both the necessary conditions and any other condition or conditions that together are sufficient to bring about the event in question.

For example, a sufficient condition of a carpet being cleaned by an electric vacuum cleaner would include not only several necessary conditions, such as a source of electrical power, a functioning vacuum cleaner, and a functioning connection between the vacuum cleaner and the source of electrical power, but also any of several different conditions that would be sufficient for “operating” the vacuum. This could be a robot, a self-propelling device that is internal to the vacuum, an animal operator, or a human operator. No one of these is necessary, but any one of them, together with the necessary conditions, would be sufficient.

It is not uncommon for some arguers to claim that an event will occur simply because one of its necessary conditions is present. But such thinking mistakes a necessary condition for a sufficient one. The necessary condition must be there, but its being there does not alone provide sufficient grounds for drawing any inference about the event in question. To make a claim that an event will occur solely on the basis of the presence of one of its necessary conditions is to draw a conclusion based on a faulty causal analysis and thus fails to provide sufficient evidence for the conclusion, which is a violation of the sufficiency criterion of a good argument.

EXAMPLE “This flashlight should work; I just bought new batteries for it. I’m going to take these batteries back and get some different ones.” If we put this argument into standard form, the fallacy is clearly revealed:

Since I just put fresh batteries in the flashlight, (premise)

and the flashlight didn’t work, (premise)

[and having fresh batteries is a sufficient condition of a working flashlight,]
(implicit premise)

Therefore, the batteries are defective. (conclusion)

The batteries may be defective, but the more likely causal explanation is that some other factor accounts for the nonworking flashlight. Although good batteries are a necessary condition for a working flashlight, they are not a sufficient condition. The argument’s implicit premise, however, assumes that they are. The arguer has therefore confused a necessary with a sufficient condition of an event.

EXAMPLE “You said that I would have to run the mile in less than six minutes to be on the track team, and I did. So why did I get cut from the team?” The arguer has assumed that meeting the eligibility requirement of being able to run a mile in less than six minutes would be a sufficient condition of being on the track team. Meeting the requirement, however, was only a necessary condition. The sufficient condition for being on the track team would probably include the meeting of many other requirements as well.

EXAMPLE Consider the situation in which a professor tells the students at the beginning of the term that, in order to pass the course, they will have to attend class regularly, read the daily assignments, participate in class discussions, take all tests and examinations, and submit a research paper. Some students faithfully meet such conditions and then experience genuine surprise when they fail the course. Their puzzlement could possibly have been avoided if the students had understood the difference between the necessary and the sufficient conditions for passing the course. The professor mentioned the necessary conditions for passing the course but not the sufficient conditions, which would presumably include students getting *passing grades* on some of the tests and the research paper.

ATTACKING THE FALLACY Many people reason in a way that confuses a necessary condition with a sufficient condition because they do not understand how the two differ. Hence, it might be helpful to clarify that distinction carefully when confronting such confusion. One of the most effective ways of doing this is to use an example that makes the difference unmistakable. Suppose a young woman were to argue that she will become a great concert pianist because she has been practicing two hours a day for fifteen years. It should be plain that, although practicing the piano is probably a necessary condition of becoming a concert pianist, it alone is not a sufficient one. The set of sufficient conditions would include not only the long hours of practice, but also having a considerable amount of talent—and perhaps a good manager. When the difference between a sufficient and a necessary condition becomes clear, the arguer should recognize the problematic character of his or her own argument, which exhibits the same form as the argument in the absurd counterexample.

CAUSAL OVERSIMPLIFICATION

DEFINITION *Oversimplifying the causal antecedents of an event by specifying causal factors that are insufficient to account for the event in question or by overemphasizing the role of one or more of those factors.*

In causal explanations, it is a common practice to point to a very obvious antecedent of an event and to designate it as *the* cause. However, a careful analysis of the notion of cause would show that the cause, or sufficient condition, of an event in most cases includes a considerable number of antecedents that only together are sufficient to bring about the event. To point to only one of those factors in a causal explanation might very well be a case of causal oversimplification.

Since the typical explanation of an event rarely includes all the literally hundreds of antecedent conditions that constitute the sufficient condition of that event, it is almost always possible to question another's causal explanation. But one should not expect a causal explanation to include every antecedent condition of the event in question. To do so would be unnecessary and an inefficient use of time and energy. Nevertheless, an argument should include enough of those factors to escape the charge of oversimplification. Otherwise, the argument fails to provide sufficient grounds for its conclusion and thus fails to satisfy the sufficiency condition of a good argument.

EXAMPLE “Corporal punishment is no longer allowed in public schools. This is why children have no self-discipline and are losing respect for authority.” We will put this argument into standard form to make the faulty causal analysis more blatant:

Since corporal punishment is no longer allowed in public schools, (premise)
 and children now have less self-discipline and respect for authority than in the past, (premise)
 [and the lack of corporal punishment is by itself sufficient to explain the difference in the behavior of today's children,] (implicit premise)
 [Therefore, corporal punishment should be brought back to the public schools.] (implicit conclusion)

The problems of self-discipline and loss of respect for authority are not new issues. The ancient Greeks used to wring their hands in anguish over such problems. But even if these were new problems, it is very unlikely that they could be traced directly to the abandonment of corporal punishment in the schools. These are very complex issues, and it is not probable that they have a single cause. For that reason, the conclusion based on a faulty causal analysis should be rejected because there is not sufficient evidence to support the implicit premise.

EXAMPLE “Children today spend an average of five hours per day watching television—time that used to be spent in physical activity and reading. This explains why young people today are fatter and dumber than kids used to be.” Even if the facts presented were true, it is unlikely that today's television viewing habits are alone sufficient to account for higher body weights and lower test scores. These habits may well be one of the causal antecedents of the alleged effect on the weight and test scores of children, but to assign that heavy a role to one factor would oversimplify this causally complex phenomenon.

EXAMPLE A radio preacher recently argued in the following way: “Marriage would be greatly helped if husband and wife would read the Scriptures together and pray together every day. No wonder divorce has increased so much! Family worship has dropped almost 30 percent in just the past fifteen years.” It is not likely that the rise in the national divorce rate could be sufficiently accounted for by data on family worship, even if the data were true. Because the reasons for the dissolution of a

marriage are usually quite varied and complex, it seems highly questionable to reduce them to a change in worship patterns.

ATTACKING THE FALLACY It is always appropriate to remind the arguer who commits this fallacy that events are almost always the result of many factors. This is an important feature of the dialogue, because it is unlikely that the arguer would disagree with that general claim. Hence, the door is at least opened for him or her to entertain other contributing causes and even to adjust earlier inferences that he or she may have drawn.

If you suspect that a causal analysis is oversimplified, because it seems insufficient to account for the event in question or because you think it overemphasizes the role of one or more specific factors, point out these problems to the arguer and request some further justification of the analysis. You may help, of course, by suggesting additional factors that you think should be considered in the causal analysis. Be sure to ask the arguer what he or she thinks of your suggestions so that they cannot be ignored, and the arguer will thus be forced to consider their merit.

Post Hoc Fallacy

DEFINITION *Assuming that a particular event, B, is caused by another event, A, simply because B follows A in time.*

Establishing the temporal priority of one event over another is not a sufficient condition for inferring a causal relationship between those events. One cannot assume that *post hoc ergo propter hoc*—that an event that occurs *after* another event (*post hoc*) therefore occurs *because* of that other event (*ergo propter hoc*). A chronological relationship is only one of the indicators of a possible causal relationship. Other indicators might include a spatial connection or perhaps some history of regularity. If temporal priority alone were sufficient to establish a causal relationship, then virtually any event that preceded another could be assumed to be the cause of it. This kind of thinking has contributed to the creation of many superstitions. For example, something was often considered “bad luck” for no reason other than the fact that it preceded an undesirable event. Such thinking mistakes a sheer coincidence for a causal relation.

The *post hoc* fallacy is sometimes confused with the fallacy of causal oversimplification. The *post hoc* fallacy, however, is not a special case of causal oversimplification. Causal oversimplification usually occurs when a particular causal antecedent is mistakenly regarded as constituting the sufficient condition of an event when it is not by itself adequate to account for that event. In the case of the *post hoc* fallacy, a causal situation is not being oversimplified; rather, the question is whether the events have any causal relationship at all.

One who commits the *post hoc* fallacy has clearly argued in a way that fails to comply with the sufficient condition of a good argument. What purports to be a causal argument has a premise that does not identify a clear-cut causal factor—only the temporal priority of one event in relation to another. But this is not a sufficient reason to infer any causal connection between the two.

EXAMPLE “Only two days after my ex-husband played golf at the charity tournament, the same one that the president of our company played in, my immediate supervisor called me in and told me that my work was unsatisfactory and that Friday would be my last day. It seems that I have a right to know what my former husband said about me, so that at least I can give my side of the story.” Here is the way this argument looks in standard form:

Since my ex-husband and my boss played at the same golf tournament,
(premise)

and my supervisor fired me right after the tournament, (premise)

[and since one event preceded the other, the preceding event caused the subsequent event,] (implicit premise)

[Therefore, my ex-husband must have said something very negative about me to my boss that caused him to fire me.] (implicit conclusion)

In order for this woman to give her side of the story, she will have to do a much better job of establishing that there was a causal relation between the tournament event and her firing. That will be very difficult to do if she bases it entirely upon the temporal priority of one event to the other.

EXAMPLE “I can’t help but think that you are the cause of this. We never had any problem with the furnace until you moved into the apartment.” The manager of the apartment house, on no stated grounds other than the temporal priority of the new tenant’s occupancy, has assumed that the tenant’s presence has some causal relationship to the furnace’s not working properly.

EXAMPLE “Ever since we quit going to church, business has been getting worse. If we want to keep from going completely bankrupt, we’d better go back to church.” Again, the claim is that one event was brought about by another event simply because of the temporal relationship.

ATTACKING THE FALLACY It is difficult to believe that anyone would really conclude that *B* is caused by *A* simply because *B* follows *A* in time. In most cases, additional factors probably lie behind the causal claim. In our examples, the manager of the apartment house may have reason to believe that the tenant has tampered with the furnace or the operator of the business may have strong beliefs about divine punishment. However, their actual arguments focus simply on the temporal character of the relationship of events. Insofar as other factors or assumptions are not specified or even mentioned, it is appropriate to point out the *post hoc* character of such a claim and to indicate that you will regard such a causal explanation as adequate only if it is supplemented by other convincing evidence.

You should have no trouble finding absurd counterexamples that could demonstrate the fallaciousness of *post hoc* thinking. Select any two events that you think the arguer would regard as being *temporally related* but *causally unrelated* events and claim that the prior one caused the succeeding one. For example, you might argue that a garbage truck passing by the house must have caused the phone to ring because

the phone rang right after the truck passed. Since the arguer will regard temporal priority as insufficient evidence for your causal claim about the garbage truck, he or she should be encouraged to abandon such grounds in his or her own argument, or at least to supplement the temporal priority with additional causal factors.

CONFUSION OF CAUSE AND EFFECT

DEFINITION *Confusing the cause with the effect of an event.*

When the Scarecrow asks the Wizard of Oz for a brain, the Wizard answers that he cannot give him a brain but that he can give him a diploma from the University of Kansas. The Wizard has confused the brain with the effect of a brain. But that is no problem in the story because such confusion is simply entertaining. In the nonfantasy world, however, resolving such causal confusion can be very important; it can assist us in coming to an accurate understanding of our experiences and in constructively addressing the future. An argument that confuses the effect with the cause of an event uses evidence based upon a faulty causal analysis and therefore does not provide sufficient grounds for its conclusion, let alone a correct understanding of our world.

EXAMPLE One prison inmate says to another: “Governor Kaine always seems to know when we’re having a good meal. He times his annual inspection visit here on the one day of the year that we have steak.” A look at this argument in standard form will help us to see the faulty causal analysis:

Since Governor Kaine always comes to visit the prison on the one day a year that we have steak, (premise)

[and either the governor has intuitive powers or the prison officials are informed of his visit in advance and serve steak because of his visit,] (implicit premise)

[and it is not likely that prison officials are informed of the governor’s visit in advance,] (implicit premise)

Therefore, Governor Kaine must have an intuitive way of knowing such things. (conclusion)

The inmate has it backwards. The third implicit premise is surely constituted by a faulty causal analysis. It is much more likely that prison officials are given advance notice of the governor’s visit than that the governor has intuitive powers that he uses to pick a day when he can get a good meal.

EXAMPLE “It’s no wonder that Natalie makes such good grades. She’s the teacher’s pet.” It is much more likely the case that Natalie is the teacher’s pet because she makes good grades. Based upon our general knowledge of classroom dynamics, if Natalie is indeed the teacher’s pet, it would seem highly unusual to treat her as a “pet” for reasons other than those related to her superior performance.

EXAMPLE Many theologians claim that an act is right because God approves of it. This is one of two possible answers to the ancient Socratic question about the rela-

relationship between God and morality in one of his dialogues, the *Euthyphro*: Is a thing good because God approves of it, or does God approve of it because it is good? In the dialogue, Socrates implicitly suggests that there is a confusion of cause and effect in Euthyphro's endorsement of the first option. Socrates takes the second option that "God approves a thing because it is good," which he believes is the proper understanding of the causal relationship between God and morality. Either Euthyphro or Socrates is confused about this causal relationship; and since each view has very serious moral and theological implications, it is important that the somebody's faulty causal analysis be corrected.

ATTACKING THE FALLACY Any causal confusion that obscures the truth should be challenged. For that reason, even if a young child were to say, "Look, Daddy, that tree moving over there is making the wind blow," it should be considered less an occasion for being amused than an opportunity for giving the child a more accurate understanding of the nature of wind.

When the thinking of adults exhibits a confusion of cause and effect, then it is all the more dangerous because the claims of adults are more likely to have an effect on the thinking of others. Hence, any kind of causal explanation that represents what you believe to be a confusion of cause and effect should be challenged in a way that would be helpful in eliminating the confusion.

If an arguer draws a conclusion based on a confusion of cause and effect, the absurd counterexample method may be the easiest way of exposing the error. If the Wizard of Oz example doesn't work, try the following somewhat more subtle example. One staff member says to another at the unemployment office: "No wonder these people can't get jobs. Have you noticed how irritable they are?" If the arguer is able to recognize that reversing the cause and effect creates a more plausible causal understanding of the factors in this situation—that the unemployed are irritable *because* they can't find a job—then maybe he or she will be able to do the same with regard to the faulty causal claim in question.

A confusion of cause and effect is sometimes not at all easy to detect. Even the absurd counterexample method will not always ensure an acknowledgment by the arguer of a confusion in his or her own causal analysis. The arguer may acknowledge that there is a clear confusion in the absurd counterexample but still insist that no such confusion exists in the case at issue. In these cases, of course, it will be necessary to explain carefully why the reversal of the cause and effect makes more sense.

NEGLECT OF A COMMON CAUSE

DEFINITION *Failing to recognize that two seemingly related events may not be causally related at all, but rather are effects of a common cause.*

When two events are found together in what appears to be a causal relation, we tend to assume that one is the cause and one the effect. Such thinking, however, can obscure another and perhaps better understanding of the relationship. One should be open to the possibility that both events may be effects of another or common cause. However, in order to identify such a common cause, it will be necessary

to place very great demands upon your understanding of causal relationships in our world.

An argument that causally connects two obvious events while *neglecting* a third, less obvious event that may be the underlying cause of each of the other two events does not provide sufficient grounds for its causal claim. Neglecting what appears to be a common cause means that the arguer has failed to produce the best explanation of the event in question. Hence, the argument cannot qualify as a good one.

EXAMPLE If it were discovered that most elementary schoolteachers have children of their own, it might be concluded either that teaching stimulates an interest in parenthood or that being a parent stimulates interest in working with children. In standard form, the argument looks like this:

Since most elementary schoolteachers have children of their own, (premise)
Therefore, teaching must stimulate an interest in being a parent, or being a parent stimulates an interest in working with children. (conclusion)

However, a more likely causal analysis of the situation is that another factor, such as a love of children, causes many people to become both parents and elementary schoolteachers.

EXAMPLE Suppose that a young college student is both obese and depressed. A typical analysis of such a situation might be that the obesity is causing the depression or that, because of the depression, the student tends to overeat. However, a more likely explanation is that some underlying psychological or physical problem is causing both effects.

EXAMPLE We often hear that current movies and television programming are bringing about a “moral degeneration” in our country. However, it seems probable that a number of other factors at work in our culture are producing both the contemporary trend in films and our changing moral standards. Because these common factors are more difficult to detect or to isolate in a causal analysis, it is simpler, although probably fallacious, to blame the filmmakers or the television programmers.

ATTACKING THE FALLACY Great care should be taken not to charge a person falsely with neglect of a common cause. In almost any causal relationship there will be peripheral factors common to the events in question, the neglect of which would constitute no fallacy. For example, if the explanation of the alleged causal relation between being an elementary schoolteacher and being a parent failed to mention that being an adult was causally necessary to both effects, it would not be appropriate to charge the arguer with neglecting a common cause. The common cause in this case is not a significant one. However, if one is attempting to explain an allegedly causal relationship between two things by reference to only those two things, and a more adequate account could be provided by appealing to an additional factor

causally common to both, then it would indeed be fallacious to neglect that alternative explanation.

If you believe that the primary problem with a proposed explanation is its neglect of a common cause of the events in question, you should demonstrate just how that common factor could provide a more adequate explanation. The arguer should then feel obligated to scrutinize your proposal and try to determine which of the causal explanations is the more adequate one.

DOMINO FALLACY

DEFINITION *Assuming, without appropriate evidence, that a particular action or event is just one, usually the first, in a series of steps that will lead inevitably to a specific, usually undesirable, consequence.*

The name *domino fallacy* derives from the child's game of lining up dominoes on end about an inch apart and then pushing the first one over, causing a chain reaction of falling dominoes. The chain reaction works in the child's game, but not all events are arranged so that a falling-domino effect ensues. For each event in any so-called series of events, an independent argument must be presented. In no case should one assume that one event will lead to or cause another event or series of events without making a separate inquiry into the causal factors that might be involved in each of those events.

The domino fallacy has sometimes been referred to as the *fallacy of the slippery slope*. As the name suggests, when we take one step over the edge of a slope, we often find ourselves slipping down the slope with no place to dig in and stop the sliding. Although this image, like the falling-domino image, may be insightful in helping to describe the fallacious thinking involved, it represents a serious misunderstanding of the nature of the causal relations between events. Most of the causal relations in the world do not work like falling dominoes or sliding down a slope, and one who thinks they do is likely to draw the unwarranted conclusion that a single event can serve as an adequate causal explanation for a whole series of other complex causal events.

EXAMPLE "If we allow gay and lesbian marriages, next there will be some who want group marriages, and soon no one will even bother to get married." Let us convert this argument, with its falling-domino feature, into standard form:

Since allowing gay and lesbian marriages will lead to group marriage, (premise)

[because there is a causal relationship between these two things,] (implicit subpremise)

and group marriages will lead to no marriage at all, (premise)

[because there is a causal relationship between group marriage and the abandonment of the marriage practice,] (implicit subpremise)

[and no marriage at all is not a good idea,] (implicit moral premise)

[Therefore, we should not allow gay and lesbian marriages.] (conclusion)

This arguer is not likely to be able to show that there are any causal relationships between the events cited, as claimed in the two implicit subpremises. These

subpremises exhibit faulty causal analyses and are therefore not good ones. Because the argument does not provide sufficient evidence to support the claims about these causal relationships, it fails to meet the sufficiency criterion of a good argument and the conclusion does not follow.

EXAMPLE “If we allow the government to limit the number of guns a person can buy each month, what’s next? If they can limit guns, they can limit how much liquor, how much food, or even how many cars you can buy. They already tell us how many deer we can shoot. Next thing you know, they will even be telling us how many kids we can have. They’ll keep on until they totally control us.”

There is no evidence here that any of these events are causally connected. In fact, it is difficult to imagine how such a connection might be made. Although it is conceivable that good reasons might be found for putting limits on some of the things mentioned, it is *not* because they are causally connected to each other.

EXAMPLE Examine the following hypothetical argument against allowing students to become members of faculty committees: “If you let students serve on faculty committees, the next thing they will want is to be members of departments, and then members of the Board of Trustees. Before you know it, they will be hiring and firing the faculty.”

The proposal to put students on certain faculty committees is one for which a number of very good reasons can be given. Whether it is wise to elect students as departmental members or to appoint students to the Board of Trustees would require separate arguments, because presumably different issues would be involved in each case. There is little reason to believe that students would not or could not distinguish between these issues and recognize that one event bears no logical or causal relationship to the other.

ATTACKING THE FALLACY If you suspect a bit of falling-domino thinking, insist that the arguer give an independent causal explanation for each event about which he or she makes a claim. Another strategy might be to counter with an unsupported claim about the connections between events in some obviously absurd series of events. For example, suggest that if you use a credit card to buy things, you will soon buy more than you can afford, you won’t be able to pay your bills, the bank will repossess your car because you are behind in your payments, you’ll lose your job because you’ll have no way to get to work, and you’ll be so unhappy you will kill yourself—all because you used a credit card. It should be obvious to the arguer that there is no reason to believe that using a credit card will necessarily lead even to the second event, let alone to suicide. Each causal connection would need a separate causal analysis. Likewise, it should become obvious that each causal relationship between the events in the arguer’s predicted series of events requires a separate treatment.

GAMBLER’S FALLACY

DEFINITION *Arguing that because a chance event has had a certain run in the past, the probability of its occurrence in the future is significantly altered.*

This fallacy is typically committed by gamblers, who erroneously think that the chances of winning are better or significantly altered in their favor because of a certain run of events in the immediate past. Remember the loser who says, “I can’t lose now, I’m

hot,” or the big loser who says: “My luck has got to change. I haven’t had a single win all night. I’m betting everything on this one.” Such people seem to be unaware that a chance event, such as the outcome of a coin toss or a roll of the dice, is totally independent of all the tosses or rolls preceding it. To commit the gambler’s fallacy, then, is to draw an inference on the assumption that the probability of a chance event’s turning out in a particular way is affected by the outcome of similar chance events preceding it.

Even though this fallacy is common among gamblers, it is not unique to them. Consider the parents who already have three sons and are quite satisfied with the size of their family. However, they both would really like to have a daughter. They commit the gambler’s fallacy when they infer that their chances of having a girl are better because they have already had three boys. They are wrong. The sex of the fourth child is causally unrelated to any preceding chance event or series of such events. Their chances of having a daughter are no better than one in two, that is, 50–50.

This fallacy, which seduces virtually every one of us from time to time, is nevertheless an argument that grossly violates the sufficiency criterion of a good argument. One cannot infer anything about the probable occurrence of a single, genuinely chance event on the basis of what has occurred with regard to similar chance events in the past. The grounds for such a claim are simply nonexistent. The fallacy confuses, among other things, a claim about statistical probability in a whole sequence of chance events with a predictive claim about a *single* chance event.

EXAMPLE Reflection about romantic concerns often involves the use of the gambler’s fallacy. Consider the young professional who argues that since the first seven matches from the dating service worked out so badly, the chances of something more positive occurring on the next match are better. If we reconstruct the argument in standard form, it looks like this:

Since I have had seven bad matches in a row, (premise)

and the outcome of the eighth match will be altered positively by the negative nature of the seven preceding it, (premise)

Therefore, my next match is likely to be a good one. (conclusion)

Since there is no causal connection between any of the first seven bad matches and the next one, the odds with regard to the eighth match will not change. Each event stands alone. The second premise represents a faulty causal analysis of chance events and provides no support for the conclusion. The argument therefore fails to meet the sufficiency criterion of a good argument.

EXAMPLE “It seems that every time I open my mail I get an offer of chances to win a lot of money or other prizes in some kind of sweepstakes. I almost always mail back the entry form to see if I have won anything. Since I haven’t won anything yet, I figure my time is coming.” This person may increase the odds of winning by sending in more entries to a single lottery, but as long as he or she sends in only one entry for each contest, the chances of winning any particular contest do not improve because there is no causal connection between the results of independent sweepstakes.

EXAMPLE “It’s been tails five times in a row. I’m sticking with heads.” There is no more likelihood that the next toss of the coin will be heads than that it will be tails

in spite of the fact that most of us are inclined to believe that the odds would be in favor of its being heads.

ATTACKING THE FALLACY An attack on the gambler's fallacy is particularly difficult. Your task is to help one who commits it to understand that there is no causal connection *between* chance events. In the case of flipping a coin, for example, the chances of getting "heads" is one in two; and if you were to flip the coin thirty times, statistical probability tells us that number of "heads" and "tails" would be fifteen each. Although it appears that something is *causing* the numbers to *even out* in this way, this is not the case. The phenomenon is simply a matter of statistical probability as it relates to the outcome of a group of chance events. There is no causal connection operating between these chance events, nor does the pattern of any previous chance events causally affect the likelihood of any subsequent chance event occurring.

Let us assume that you get an arguer to *agree in principle* that chance events are not causally affected by previous chance events. However, getting him or her to hold fast to this agreement in an actual case may not be an easy task. For example, if you were to flip a coin thirty times and the first nine flips turned out to be "heads," many observers would be sorely tempted to infer that the next flip is *more* likely to be "tails" simply because such a trend would be necessary to reach that statistically probable balance of fifteen "heads" and fifteen "tails" at the end of thirty flips. After all, there is only room for six more "heads" out of the next twenty-one flips. But they would be wrong; the tenth flip is in no way more likely to be "tails." Every flip, including the tenth one, is independent and has exactly one chance in two of being "tails." These observers have unwittingly broken their agreement and imported back into the situation the rejected notion that previous chance events may causally affect the outcome of subsequent chance events. They even find themselves believing the absurd idea that the coin, in some sense, "knows" what happened in the nine previous flips and will soon "correct" the trend in "heads." It is your job to point out that such a faulty causal analysis of chance events will always lead to an unwarranted conclusion.

Another strategy that may work on some gamblers is to show how using the gambler's fallacy can lead to contrary conclusions. Consider the once-a-month poker player who has had poor hands all evening. The longer this series of unfortunate events continues, the more such a player might be led to conclude, "This just isn't my night." But one could just as well conclude, "Surely my time is coming; I'm bound to get a good hand soon." Neither conclusion is warranted because both derive from a misunderstanding of the character of chance events. Moreover, there is apparently no good reason why a person should draw one conclusion rather than the other. The choice appears to be wholly arbitrary.

ASSIGNMENTS

B. Causal Fallacies For each of the following arguments, (1) identify the type of causal fallacy illustrated, and (2) explain how the reasoning violates the sufficiency criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. The reason you caught such a cold is that you didn't wear a hat to the football game. I told you you'd be sick when you went out the door without a hat on.
- *2. Senator Lane came out in favor of the budget bill just one week after he had a meeting with the president at the White House. The president must have really applied some pressure.
- *3. You said that if I'm going to make more friends, I have to learn to control my temper. Well, I haven't lost my temper in over six months, and as far as I'm able to tell, I haven't made a single new friend.
- *4. Son, all it takes is one drink to start you on the road to alcoholism. The same is true with marijuana; it's that first smoke that is crucial. If you try it and like it, you'll want more, and the more you smoke, the more dependent you'll become. Then you'll try the harder stuff and finally end up completely "freaked out." Take my word for it and stay away from that stuff.
- *5. We haven't shot a deer in three seasons. We're due to bag one on this trip.
- *6. Recent studies show that most successful executives have very large vocabularies. So if you wish to have a successful business career, I would suggest that you develop as large a vocabulary as possible.
- *7. I think that the reason that Yoko and Liam have been so rude and irritable is that the customers haven't been giving them many tips lately.
- 8. You told me a year ago that in order to get a loan at this bank, I would have to have stable employment. I've had this job I now have for over a year, so I don't understand why I was turned down for a loan.
- 9. Medical records show that alcoholics tend to be undernourished. These data strongly suggest that a poor diet contributes to alcoholism.
- 10. Our study shows that 80 percent of the young people who are users of hard drugs have serious difficulties in relating to their parents. So I think that a stricter enforcement of our drug laws could significantly reduce the domestic problems of these young people.
- 11. Sally and Phil were the happiest couple I knew, until Sally started working outside the home. It just shows how the wife's abandonment of the traditional role can destroy a marriage.
- 12. I'm not going to invite Gary to my party tonight. If I invite him, he'll bring all his friends, and they'll bring their friends, and before you know it, the party will be out of control, the neighbors will call the police, and we'll all end up in jail.
- 13. If you speak softly but firmly to your children, they won't be boisterous or undisciplined. That's the way I've brought up my children, and they've always been well behaved.
- 14. We won't be here this weekend. We'll be up in the mountains enjoying the pleasures of fishing and hiking. Rain has caused us to postpone our camping trip for the past two weekends, so this weekend is bound to be a pretty one.

C. For each of the following arguments (1) identify, from among all the fallacies studied in this chapter, the fallacy illustrated, and (2) explain how the reasoning violates the sufficiency criterion. There are two examples of each of the fallacies discussed in this chapter.

1. The high rate of divorce can be directly traced to the feminist movement. It has encouraged women to be more independent and assertive in relationships.
2. Professor Stainback, you clearly said that an argument has to be understood to qualify as a good argument. You admitted that my argument is perfectly understandable. So why isn't it a good argument?
3. Those who major in philosophy and take the LSAT or the MCAT do statistically better than those from any other discipline. Therefore, if you want to do well on one of those exams, I suggest that you major in philosophy.
4. I don't think you should invest your money in stocks. You know, a bird in the hand is worth two in the bush.
5. I dated a blond once, and you know, they really are dingbats.
6. I know why our club meetings are so boring; no one shows up for them.
7. **SHARON:** As treasurer of our sorority, you made the rest of us pay our dues weeks ago, but you haven't paid yours yet. Why not?
SANDRA: Well, I needed to pay some other bills at the time. Besides, as treasurer, I can pay anytime.
8. Surely there will be a good movie showing at the Cineplex this weekend. They haven't had a really good one there for four or five weeks.
9. Emory & Henry is the best college for me. If I get accepted, that's where I'm going.
10. A recent poll of more than two thousand adults conducted in the Southeast revealed that more than 65 percent of Americans believe strongly in their religious faith and attend worship services weekly.
11. No wonder children are joining gangs. When both parents work and spend so little time with their children, the children tend to look for some sort of family-like support.
12. I worked in Judge Hainsworth's court for over a year. Not one woman complained of sexual harassment. Judge Hainsworth is not guilty of sexual harassment, because if he were guilty, other women would have said something about it.
13. If only my parents hadn't divorced while I was in junior high school, I would be a happy, self-confident person today.
14. No wonder she can run five miles so fast; she's in great shape.
15. **PATTY:** I'm in real trouble, Christine. I'm pregnant and my parents will hit the ceiling. I don't want to get married, and I don't want to have to take care of a baby. Jeff wants us to get married and have the baby. What do you think I should do?
DENISE: Well, you've made your bed. Now you'll just have to lie in it.
16. I can't understand why I'm suddenly having problems with my car. I never had a bit of trouble with it until I had it serviced at Singleton's Auto Service. They must have messed up something.
17. If students don't stand up to the administration on this issue, they will begin to take away more and more of our rights until we don't have any left.
18. I don't understand why my car stopped; I have *plenty* of gas.
19. I've driven while I was drunk many times and have never been caught, so I know that my luck is wearing thin. Somebody else better drive us home.
20. Whatever happened to southern hospitality? The people in Atlanta aren't friendly at all. I got lost while I was visiting there last weekend and stopped

several times to ask people for directions. And they were not the least bit friendly.

21. If you have money to invest, I suggest that you put it all in bank certificates of deposit. That way your money is safe. CDs are insured by the federal government.
22. The majority of the members of Congress and state legislatures are lawyers. There must be something about law school or the practice of law that prompts people to run for office.
23. Why should I be arrested like a common criminal just because I had a few glasses of wine at the restaurant before I drove home? I'm an upstanding citizen of this community.
24. Since the defendant didn't take the stand to defend herself, she must have something to hide. She must be guilty.
25. A survey of more than one hundred thousand female college students has shown that one in every five women in the United States has some kind of eating disorder.
26. If we allow them to impose censorship on our school newspaper, they'll soon censor the books and magazines in the library, and even our textbooks. Eventually, they'll be telling the teachers what they can say and the students what they can think.
27. Professor Little said that if there had been TV in 1896, William Jennings Bryan, with his charismatic personality, would have won the presidential election.
28. Right after I wrote the mayor about the property tax increase, she came out in favor of it. She must have been persuaded by my argument.

D. Submit an argument that you have read or heard within the past week that defends a position on a current controversial social, political, moral, religious, or aesthetic issue. Photocopy or rewrite the argument from its source and tape it on a separate page from your typewritten analysis of it. In your analysis, reconstruct the argument in standard form and then evaluate it in terms of the five criteria of a good argument. Point out any *named* fallacies that violate the structural criterion, the relevance criterion, the acceptability, and/or the sufficiency criterion. After setting forth the best argument possible for the position that you think is the most defensible, evaluate your own argument in accordance with the five criteria of a good argument.

E. Use a 3-by-5 card to submit an original example (found or created) of each of the fallacies that violate the acceptability criterion and then create your own strategies for attacking each of them.

F. At the end of the last chapter you were asked to identify each of the fallacies that violate the acceptability criterion committed by Dad in his third email to Jim. In this fourth of five emails, Dad commits each of the fourteen fallacies of sufficiency discussed in this chapter. Each of the fallacies is committed only one time, and each number represents the presence of a named fallacy immediately preceding it. Identify by name each of the fallacies committed:

Dear Jim,

You indicated in your last email that I seemed to show a lack of respect for the role of reason in our lives. I'm sorry that I gave that impression. In all fairness, I believe that reason is a very good tool to use when examining important issues, but it just doesn't apply to religion. (1) And strange as it may seem, when philosophers inappropriately apply it to religion, they tend to ignore the fruits of their rational inquiry or explain it away, such as the evidence of miracles. For example, when your mom's brother was diagnosed with terminal cancer two years ago, in faith he asked God to heal him, and God did. He went to his doctors, and they could find no sign of his cancer at all. But the philosophers just seem to ignore that kind of evidence. (2) They even ignore the most obvious evidence of all for believing that God exists, and that is the fact that the philosophers haven't proved that He doesn't. (3)

Yet the force of such logic fails to dissuade the philosophers. Look at how they treat evidence of religious experience. It isn't that they have nothing to say about religious experience; they have plenty to say about it. The problem is that just because they have never had a religious experience, they deny the authenticity of any other person's religious experience (or at least find other explanations for them). (4) They also make a big deal about how all the evidence supports the view that evolution is true and that creationism is false. But I've done some serious research on that issue, and their claims don't hold up in the face of evidence. During the past several years, I have surveyed everything that has been written about evolution in our denomination's *Religious Digest*, and not a single article indicates any merit in the evolutionists' theory. (5)

So, as you can see, I seem to treat evidence more seriously than the philosophers do. A number of years ago, in a rare moment of doubt, I asked God to give me a sign that He existed. The very next day God blessed me with a job promotion, and I had no idea that I was even being considered for the position. It came right out of the blue. So, even in the midst of my doubt, I heeded the force of evidence. (6) I'm not saying that God responds in this direct way to every request I make, but whatever He does, I always find that there is a good reason for it. (7)

Jim, the bottom line always takes us back to faith. When I was in college, I held fast in faith. If I had questioned my faith as my philosophy professor tried to get me to do, I wouldn't be enjoying the wonderful life that I do today. (8) And faith is no small matter. The Bible says that without faith, you can't enter into the kingdom of heaven. In other words, if you have faith, you will go to heaven. (9) And every day that goes by with you in a state of doubt makes it all the more likely that some unexpected fatal accident may occur, with you ending up in a place you don't want to go. (10)

As I mentioned in a previous email, one of the most serious problems with giving up belief in God is that if you don't believe in God, you'll have no basis for morality. That's just common sense. (11) An act is right or wrong because God says it is. (12) If you listen to the philosophers, you'll start questioning your religious beliefs, you'll then abandon religion altogether, and eventually you'll end up as some kind of moral nihilist—with no morality at all. (13) There is little doubt about it. Taking philosophy courses causes young minds to give up being people of faith. (14)

Love,
Dad

G. Assume the role of Jim and write an email to Dad that responds to or attacks his poor reasoning in one of the above email's paragraphs. However, try to attack each fallacy committed without using the actual *name* of the fallacy. Use the skills you have learned from the "Attacking the Fallacy" sections throughout the text to make your case.

FALLACIES THAT VIOLATE THE REBUTTAL CRITERION

CHAPTER

9

This chapter should help you to:

Define or describe in your own words the essential features of each of the named fallacies that violate the rebuttal criterion of a good argument.

Recognize, name, and explain the faulty pattern of reasoning in each of these fallacies when it is encountered in ordinary discourse or discussion.

Make use of effective strategies for attacking or helping others to correct their faulty reasoning when they commit any of these fallacies.

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.

This rebuttal feature of an argument is simply missing from most of the arguments we present or confront. However, to satisfy the demands of this principle, a good argument should anticipate the criticisms that might be brought against the position being defended and blunt the force of those criticisms by addressing them in the so-called *rebuttal premises* of one's argument.

The fallacies in this chapter are ways of arguing that fail to provide an effective rebuttal to the criticisms of one's argument and of the position that it supports. Each of the fallacies violates the rebuttal criterion in a distinctive way and belongs in one of the following categories: (1) the fallacies of counterevidence, (2) the *ad hominem* fallacies, or (3) the fallacies of diversion.

FALLACIES OF COUNTEREVIDENCE

Fallacies of counterevidence are committed by one who is attempting to escape the requirement of an effective rebuttal by failing to deal honestly with the counterevidence or criticism. The arguer either refuses to consider or unfairly minimizes the counterevidence to the view being defended or simply ignores or omits reference to the criticisms or counterarguments.

DENYING THE COUNTEREVIDENCE

DEFINITION *Refusing to consider seriously or unfairly minimizing the evidence that is brought against one's claim.*

The most radical form of this fallacy is an unwillingness to acknowledge any conceivable evidence that might count against one's position. Rather than denying the counterevidence outright, the arguer will sometimes simply refuse to take it seriously or will unfairly minimize its strength. The impression is thereby given that the arguer is looking at the counterevidence, but in fact it is only for the purpose of "explaining it away." Such a response to counterevidence clearly obstructs the discovery of truth.

EXAMPLE "I don't really care what your biology textbook says. I know that I didn't come from some monkey or lower form of life or whatever you call it. The Bible tells me that God created man in his own image. And unlike the Bible, your textbook is just some person's opinion." Let us put this argument into standard form:

Since your biology textbook says that humans evolved from a lower form of life, (premise)
 and your text simply expresses some person's opinion about the origin of humans, (rebuttal premise)
 and the Bible says that God created humans, (premise)
 [and the Bible is not some person's opinion, but expresses genuine truth,] (implicit rebuttal premise)
 Therefore, the Bible expresses the correct view about how humans got here. (conclusion)

It is clear that there is no evidence that could possibly convince the arguer on the matter of biological evolution because any evidence offered would be "explained away" in advance as simply "some person's opinion." The rebuttal premise fails to take the evidence seriously and is therefore ineffective. Further discussion of the issue in this context would seem to be a waste of time and mental energy.

EXAMPLE Suppose that Debbie is discussing with her college roommate, Pat, the possible legalization of marijuana. As a part of the discussion, Debbie calls attention to a number of recent government studies concerning marijuana use. These reports conclude that there is no strong evidence to suggest that a moderate use of

marijuana is harmful. Pat retorts that she doesn't "care what the conclusions of the government or any other studies are. Marijuana is obviously harmful and shouldn't be legalized under any circumstances."

In this argument there is no attempt to address the counterevidence or even to explain it away. Pat simply denies that evidence. There is apparently no evidence that she would accept as weakening her position. Indeed, if Debbie were to ask her directly if there were any evidence that she might consider, she would probably reply that nothing could convince her that she might be wrong.

EXAMPLE

SENATOR WINGER: "Homosexuality is a learned trait. You don't *have* to be homosexual. Your so-called studies that say it is something you're born with were fabricated by the radical left to try to force us to accept the gay lifestyle."

Senator Winger not only denies that there is any credible counterevidence to his claim, he also takes the further step of "explaining away" the evidence that is offered by saying that it is the work of leftist radicals. Not only is such an attempt at rebuttal not effective, it seems likely that the arguer would not take seriously any evidence brought against his view.

ATTACKING THE FALLACY To demonstrate whether the arguer is genuinely open to counterevidence, you could ask him or her what particular kind of evidence, if it could be produced, might seriously weaken his or her claim. If the arguer cannot or will not specify such evidence, it would probably be more productive and less frustrating to shift the discussion to some other issue. However, you might want to point out to the arguer the fruitlessness of carrying on a discussion with one who will entertain no counterevidence and who refuses to take seriously the principle of fallibility. If the arguer specifies some conceivable evidence that might tend to alter his or her opinion, then you should make a reasonable effort to find that evidence and bring it to the table.

IGNORING THE COUNTEREVIDENCE

DEFINITION *Arguing in a way that ignores or omits any reference to important evidence unfavorable to one's position, giving the false impression that there is no significant evidence against it.*

None of us likes to lose a hard-fought tennis game, especially if we think that we are the best player. And we certainly do not want to win a game by cheating, for example, by calling a close but "in" ball "out." Moreover, we readily acknowledge, no matter how personally disappointing it is sometimes, that the best tennis player on any given day is the one who wins the match. Similarly, none of us wants to lose an argument, mainly because we think our ideas are the most defensible. But we know that the best position is the one that is best supported by the evidence, and most of us would not want to win an argument by cheating, that is, by deliberately ignoring evidence that we know is damaging to our case. In reasoning, the best position is the one that is best supported by all the evidence. Nevertheless, if one holds

very strongly to a position, it is tempting to ignore evidence that could throw that judgment into question. Those who commit the fallacy of ignoring the counterevidence have deliberately or unwittingly given in to that temptation.

As truth-seekers, we should welcome the presentation of any evidence that might weaken our position. If we can show that evidence *not* to be damaging in any way, we can be all the more assured of the merit of our position. On the other hand, if the counterevidence significantly damages our position, we should be grateful, for it may lead us closer to the truth by steering us away from an indefensible or questionable position. An argument that ignores relevant counterevidence fails to satisfy the rebuttal criterion of a good argument because important relevant evidence has not been properly evaluated.

EXAMPLE “Swift capital punishment for those found guilty of committing serious crimes would be a very good idea because it would quickly rid society of undesirables and reduce the fears of the citizenry; it would greatly lower the costs involved in maintaining such people in our penal institutions during long appeal procedures; and it would be a considerable deterrent to would-be criminals.” If we look at this argument in standard form, it becomes clear that it fails to address the obvious counterevidence:

Since killing immediately those who are convicted of serious crimes would reduce the fears of other citizens, (premise)

because it would rid society of dangerous people, (subpremise)

and it would save a great amount of money required to maintain convicts during long appeals procedures, (premise)

and it would be an effective deterrent to potential criminals, (premise)

Therefore, we should swiftly carry out capital punishment for those convicted of serious crimes. (conclusion)

Anyone familiar with the capital punishment debate should be aware that this “swift punishment” argument ignores a number of relevant considerations, not the least of which is the injustice that might be done by precluding the right of appeal. This constitutionally guaranteed procedure is a standard and defensible part of our legal system that helps to assure that justice is done. The argument also omits any moral premise, although it draws a moral judgment. Because the argument fails to address these and other important considerations, it cannot be a good one.

EXAMPLE “Motorcycles are dangerous; they are noisy; only two people can ride at once; you can’t ride them in cold or rainy weather; and in most states you are required to wear an uncomfortable helmet. I can’t see why anyone would want to buy one.”

The arguer has neglected to consider several factors relevant to the desirability of owning and using a motorcycle. For example, the motorcycle is a relatively inexpensive form of transportation; it is more maneuverable than a car; it is easier to find a place to park it; and many people simply find it more enjoyable than a car. A good argument would contain rebuttal premises that address these and other features of the motorcycle/auto debate.

EXAMPLE “I can’t see why anyone would want to go to a movie theater rather than watch movies at home now that it’s so easy to rent them at a store or even online. If you rent a movie, you can sit in the privacy of your own home while you watch; you have a wider selection of movies to choose from; you don’t have to pay the high theater prices; you don’t have to get dressed up; you don’t have to hire a babysitter; you don’t have to fight the traffic or buy gasoline to get to the theater; and most important, you don’t have to pay those exorbitant prices for food and drinks.”

This kind of argument might possibly persuade a number of people to avoid the theater and watch movies at home, but for many others it ignores a number of important factors. First, rental movies usually are not available until several months after their release to theaters. Second, many people find it enjoyable to dress up and go out for an evening. Finally, one cannot really ignore the “big-screen effect.” One ought to address these and other factors when evaluating the relative merits of watching films at home and going to see them in a movie theater. A failure to do so is a case of ignoring the counterevidence.

ATTACKING THE FALLACY Do not be surprised if someone who presents an argument fails to accompany it with all the evidence *against* its conclusion. It is quite possible, of course, that the arguer has considered such evidence and is of the opinion that it does no damage to the claim at issue and therefore deserves no mention. However, in view of the fact that we rarely believe that counterevidence does any real damage to our favorite opinions, we should be skeptical of such an implicit or explicit view. If you suspect that an arguer has ignored evidence, make sure that he or she is aware of the counterevidence and can demonstrate to your satisfaction that it does not damage his or her position. If the arguer is not aware of or does not acknowledge the counterevidence, you might point out the most damaging counterevidence yourself and ask how, if possible, the force of it could be effectively blunted. If the opponent cannot do so, you might suggest that the arguer consider giving up his or her flawed position.

Be careful not to be misled by some of the tactics of the evidence-ignorner. One clever device is to acknowledge and then dispose of some minor objection to one’s position before going on with a one-sided assessment of the evidence. This gives the impression of objectivity and can sometimes be very disarming to the victim of this fallacy. The alert critic, however, will not let the arguer ignore the serious objections to the question at issue.

ASSIGNMENTS

A. Fallacies of Counterevidence For each of the following arguments, (1) identify the type of fallacy of counterevidence illustrated, and (2) explain how the reasoning violates the rebuttal criterion. There are two examples of each of the fallacies discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. I don’t care what the university report on pornography says. I know that watching pornographic materials *does* encourage people to commit sex crimes.

We must not allow the supporters of this report to give free rein to the pornographers.

- *2. Even if I were in great shape, I would have no interest in climbing Mount Everest. It's steep, treacherous, and barren; it's unbelievably cold; and you risk your life doing it. Besides, what can you do after you get to the top?—just turn around and come back down.
3. Why should the president set up a special commission to figure out what to do about illegal immigrants? What's to figure out? We *know* what to do about it. Send them all back! They're here illegally, so you just send them back! It's as simple as that.
4. **PROFESSOR TO STUDENT:** Why should we meet to discuss your grade on your last test? I read it very carefully, and the grade I gave you is the grade that you deserved. I don't need to hear about how I might have misunderstood you.

AD HOMINEM FALLACIES

An *ad hominem* argument is an argument directed “toward the person.” The fallacies in this section fail to meet the requirement of an effective rebuttal by unfairly attacking the *critic* of one's argument instead of addressing his or her criticisms or presentation of counterevidence. This may be done by attacking the critic in a personal or abusive way (*abusive ad hominem*), by claiming that the criticism is poisoned by the critic's questionable motives or personal circumstances (*poisoning the well*), or by claiming that the critic acts or thinks in a way similar to the way being criticized (*two-wrongs fallacy*).

When dealing with the “person” in an argumentative context, it is very important to make a distinction between a person's *argument* and *testimony*. For example, if a known liar or psychotic is testifying as a witness, the fact that he or she is a liar or psychotic is indeed relevant to the credibility of his or her *testimony*, that is, the description or reporting of events. However, if the liar or psychotic formulates and presents an *argument*, that argument can and should be evaluated independently of its source. It makes no difference whether it comes from a demented mind, a child, or a Nazi; an argument can and must stand on its own. After all, even the most despicable person may be able to construct a good argument. For example, if an argument in opposition to the death penalty comes from a death-row inmate, the source would not make the argument any less or any more worthy of our consideration. We could conclude, then, that although a person may have questionable motives, personal characteristics, or behavioral issues that might rightly affect our assessment of his or her *testimony*, it should have nothing at all to do with our evaluation of that person's *argument*. To allow such things to affect our assessment of another's argument would put us in the position of committing an *ad hominem* fallacy.

While attacks upon the critic are primarily ways of avoiding the obligation of providing an effective rebuttal to a criticism or counterargument, they also violate the relevance criterion of a good argument. In no way do the characteristics, behavior, or motives of the critic have any bearing on the merit of his or her criticisms or counterarguments.

ABUSIVE *Ad Hominem*

DEFINITION *Attacking one's opponent in a personal or abusive way as a means of ignoring or discrediting his or her criticism or argument.*

The abusive or personal attack often takes the form of calling attention to some distasteful personal characteristic of one's critic. What that distasteful thing might be in any particular situation depends on what the arguer happens to find repugnant. A person may be abused for being messy, fat, smelly, academic, foreign, atheistic, feminist, liberal, conservative, a reader of the *New York Times*, a viewer of Fox News, or any number of other things. However, the abusive *ad hominem* is not just a case of directing abusive language toward another person. There is nothing fallacious about calling people names or saying ugly things about them. The fallacy is committed when one engages in a personal attack as a means of ignoring, discrediting, or blunting the force of a counterargument. For this reason, any argument that uses what the arguer finds personally distasteful about an opponent as a reason for ignoring or rejecting his or her argument or criticism cannot be a good one.

EXAMPLE “No wonder you think sexual promiscuity is all right. You know you've never had a really good relationship with a woman. So it's not strange that you'd resort to recreational sex.” If we put this argument into standard form, the abusive *ad hominem* should become quite clear:

Since you think that sexual promiscuity is morally acceptable, (premise)

and you have never had a good relationship with a woman, (premise)

[and because your position stems from your own lack of a good sexual experience,] (implicit premise)

[Therefore, your position or argument about sexual promiscuity is without merit.] (implicit conclusion)

Rather than addressing the merit of the opponent's argument about sexual promiscuity, the arguer is simply being abusive. The arguer uses what he or she considers to be a negative personal fact about the critic as a reason for not seriously considering the critic's argument or claim. But to abuse a person rather than rebut his or her criticisms or argument is a violation of the rebuttal criterion of a good argument. Therefore, the conclusion of the argument does not follow.

EXAMPLE

BARBARA: Professor Lay gave an excellent lecture last night on sculpture and the creative process. She suggested that one of the best ways for a sculptor to make a piece of stone or metal come alive is to imagine oneself inside the piece being sculpted—trying to get out.

ANDY: I have no interest in Professor Lay's opinions. I'd be surprised if any piece of her sculpture has even “placed” in an art show. Have you ever seen any of her junk?

An abusive attack on Professor Lay's artistic ability is simply a means of ignoring the substance of her insights about the creative process.

EXAMPLE

FREDDIE: I think we need to clean up this place tonight, Wayne. The landlord wants it to look decent when he shows it to a prospective tenant tomorrow. He said that he lost a prospective tenant he showed it to last week because it was so messy in here, especially the kitchen. He reminded us that we agreed in our contract that once we gave notice to vacate, we would keep the apartment clean for showing to prospective tenants.

WAYNE: What does he know about “clean”? He’s been wearing the same shirt for a week. Wayne is not responding to the landlord’s argument about keeping the apartment clean during the “show” period; he is using his negative assessment of the landlord’s personal habits as a device to avoid dealing with the substantive claim at issue.

ATTACKING THE FALLACY When we are abusively attacked, we are tempted to counterattack in the same abusive way. But yielding to that temptation will not help advance the debate on the question at issue. The most constructive response is to point out to the arguer that he or she is being abusive and then politely ask for an evaluative response to your argument or criticism. Sometimes a simple “But what do you think of my *argument*?” will do.

If an arguer persists in a personal attack on you rather than responding to your criticisms or argument, you should try to find a way to encourage him or her to separate the evaluation of a person from the evaluation of the merit of that person’s idea or argument. You might point out that all of us are likely to encounter many disagreeable people in our lifetimes, many of whom will have good ideas; and if we cannot separate the person from those ideas, we will probably fail to reap the benefit of many good insights. Take the first step and acknowledge, if appropriate, any merit that you might find in the abuser’s position. Such behavior just might encourage similar behavior on his or her part.

POISONING THE WELL

DEFINITION *Rejecting a criticism or argument presented by another person because of his or her personal circumstances or improper motives.*

This fallacy is called *poisoning the well* because its intended effect is to discredit the source of an argument or point of view in such a way that it precludes any need to consider the merit of that position. In other words, it “damns the source,” so that nothing that comes from that source, because of the arguer’s personal characteristics or motives, will be regarded as worthy of serious consideration. Since a good argument must provide an effective rebuttal to the criticism of an argument or the position it supports, an argument that inappropriately poisons the *source* of an argument or criticism, and thus prevents it from even being seriously entertained or addressed, cannot be a good one.

EXAMPLE “You’re not a woman, so anything you might say about abortion is of no significance.” Let us look at how this argument appears when converted into standard form:

[Since you have criticized my argument on the subject of abortion,] (implicit premise)

and you are not a woman, (premise)

[and no man could have anything of importance to say on the subject of abortion,] (implicit premise)

Therefore, your criticisms of my position on abortion are not worthy of my consideration. (conclusion)

The special circumstance of not being a woman should not preclude a man from criticizing or defending a position on the question of abortion that is worthy of serious consideration. But the arguer does not allow us to hear what the man has to say, let alone give us her attempted rebuttal of it.

EXAMPLE “You can’t believe what Professor Mahaffey has to say about higher salaries for teachers. As a teacher herself, he would naturally be in favor of increasing teachers’ pay.” The fact that Professor Mahaffey is a teacher should not preclude him from giving an argument that deserves our serious consideration. The only issue is whether he has a good argument in support of his claim.

EXAMPLE “Since you aren’t a member of a sorority or fraternity, you’re in no position to tell us how we should or shouldn’t treat our pledges.” The frequency with which this attempt to poison wells is used should not deter us from pointing out its fallacious character. An argument or criticism stands on its own; it matters not that it may have come from one who is not a member of a sorority or fraternity.

ATTACKING THE FALLACY It is sometimes quite difficult to attack the poisoning-the-well fallacy, especially if it is your well that has been poisoned, because even your attack on such reasoning supposedly comes from a contaminated source. Perhaps the most constructive approach in such cases is to confront the issue directly: “Okay, you’ve decided that anything I might say is poisoned, even before I’ve said it. That is a very clever device, and there’s not a whole lot that I can do about it. But I don’t intend to be silenced so easily. One reason you might want to silence me is that you think that what I have to say might seriously damage your position. I think I *do* have something significant to say on this issue, and I’d be interested in your response to it.”

You can, of course, always use an absurd counterexample or two: “Since none of you in this class are teachers, I have no intention of reading your course evaluations,” or “Since you aren’t a novelist, your criticisms of my novel aren’t worthy of my consideration.”

TWO-WRONGS FALLACY

DEFINITION *Rejecting a criticism of one’s argument or actions by accusing one’s critic or others of thinking or acting in a similar way.*

The Latin name of this fallacy, *tu quoque*, translates as “You [do it] too.” The arguer who commits this fallacy is implicitly saying to the critic, “Because you are guilty of doing the same thing or thinking the same way that you are criticizing me for, your argument is not worthy of my consideration.” This counterattack on

the critic functions as a way of avoiding the obligation to rebut his or her criticism or argument.

Almost all children feel entirely justified in their questionable behavior if they can respond to the scolding parent with “but he [or she] did it first.” But there are also adults who think that their behavior is justified if they can say to a critic, “You do the same thing!” Even though most of us would agree that “two wrongs don’t make a right,” it almost always seems to make us feel better, when our own behavior is questioned, if we can point out that our critic, or some other person, acts in a similar way.

However, children and adults who commit this fallacy are not primarily concerned with justifying their behavior by the behavior of a critic. Neither are they really concerned by the inconsistency between what we *say* and what we *do*, even though they may claim that we are hypocrites and ought to “practice what we preach.” What they are really doing is using the behavior of the critic as a reason for abdicating their responsibility to address the substance of his or her criticism or argument.

EXAMPLE

THURMAN: At your age, you really shouldn’t work so hard, Laura. You’re going to exhaust yourself completely and end up in the hospital.

LAURA: You work just as hard as I do, Thurman, and you aren’t one bit younger than I am.

Laura has not really responded to Thurman’s claim that if she continues to work at the same level, she is likely to develop some serious physical problems. Instead, she has used the *you do it, too*, argument as a way to draw attention away from herself and to avoid dealing with the issue. In standard form, Laura’s argument looks like this:

Since you have made an argument against my working so hard, (premise)

and you work as hard as I do, (premise)

Therefore, I do not need to address your argument. (conclusion)

Laura argument’s miserably fails to meet the conditions of the rebuttal criterion.

EXAMPLE

FATHER: I really don’t think that you should be drinking. Alcohol dulls your senses, reduces your physical control, and may even be psychologically addictive.

SON: That’s not a very convincing argument, Dad, when you’re standing there with that glass of bourbon in your hand.

Although it may be tempting for the son to point out to his father the apparent inconsistency between what he is saying and what he is doing, the proper action is to assess the merit of the father’s argument. The father’s failure to practice what he preaches does not neutralize the effect of the argument.

EXAMPLE Suppose that the golf pro tells you during your first golf lesson that the first and most important thing to do in learning to become an effective golfer is to “keep your head down and your eye on the ball.” It would be fallacious to

conclude that you are not being given sound advice simply because the golf pro doesn't always keep *her* head down when *she* plays tournament golf.

ATTACKING THE FALLACY If an arguer points out an inconsistency between your argument or criticism and your own behavior, there is no reason to be intimidated or silenced by such a charge. It may be best to admit the charge, if true, and to confront the arguer who commits this fallacy by insisting that he or she set aside concerns about your possible inconsistency and evaluate the merits of your criticisms or argument. A perceived inconsistency between a critic's words and deeds does not relieve an arguer of the responsibility of effectively rebutting criticisms of his or her argument or the position it defends.

The crucial point here is that the indefensible behavior of another is *not* a sufficient reason for abandoning the obligation to address an arguer's criticisms or argument. Because the inclination to do so is so emotionally compelling, one usually does not fully recognize its fallacious character until it is pointedly brought to one's attention. And that, of course, is your job.

ASSIGNMENTS

B. *Ad Hominem* Fallacies For each of the following arguments, (1) identify the type of *ad hominem* fallacy illustrated, and (2) explain how the reasoning violates the rebuttal criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. **TONYA:** Just stop yelling at me! The only way that we're ever going to solve any problem is to sit down and talk calmly about it. Screaming at me won't help in any way!
MARK: Well, you don't yell! You just cry all the time! Do you think that's any better?
- *2. **PARISHIONER TO PRIEST:** You've never been married, so why should I listen to your advice concerning my marital problems? How could you possibly know what you're talking about?
- 3. Do you really expect me to dignify your comments against my proposal by responding to them? They simply confirm what I've always thought about you, anyway. Your thinking is shallow, naive, and uninformed. And I feel that you're wasting my time.
- 4. **TERRI:** You know, Julie, with all this stuff about AIDS, you really should be more careful about the guys you sleep with.
JULIE: *Me* be careful? You've had at least a half dozen partners since Christmas!
- *5. **MR. PARKER:** My political opponent, Representative Ritchie, is not telling the truth when he says that he has never missed a single roll-call vote in the House of Representatives during his long tenure. According to the *Congressional Record*, Mr. Ritchie missed eight roll-call votes during his first term.
MR. RITCHIE: Mr. Parker, is the *Congressional Record* the only piece of reading material that they allowed you to read at the mental hospital where you were a patient during my first term?

6. Don't tell me how to raise my children! I don't care how much you've studied child psychology; if you don't have any children of your own, you can't possibly understand kids.

FALLACIES OF DIVERSION

The fallacies in this section fail to meet the rebuttal criterion by attempting in various ways to divert attention away from the weakness of an argument, the strength of an opponent's criticism or argument, or both. These argumentative devices help one to maneuver into a more advantageous or less embarrassing position by directing attention away from the actual issue. In this way, the arguer can avoid responding to the criticism or argument. Some common diversionary tactics are distorting or misrepresenting the criticism or argument (*attacking a straw man*), attacking only trivial points of the criticism or argument (*trivial objections*), trying to distract discussants to a side issue (*red herring*), or ridiculing the critic or making a joke related to the criticism or argument (*resorting to humor or ridicule*).

ATTACKING A STRAW MAN

DEFINITION *Misrepresenting an opponent's position or argument, usually for the purpose of making it easier to attack.*

A *straw man* is a metaphor used to describe the caricature of an opponent's argument that the faulty arguer substitutes for the flesh-and-blood original version. But a successful attack on this strawlike substitute is not a successful attack on the actual criticism or argument of the critic. According to the rebuttal criterion, a good argument must effectively rebut the *strongest* version of a criticism or argument against it. Since the arguer has attacked a deliberately weakened version of that argument, he or she has failed to satisfy the rebuttal criterion.

One may misrepresent another's argument in several ways. First, one may *distort* it. This is often done by paraphrasing it in words that subtly include one's own negative evaluation of it. Second, one may *oversimplify* it. A complex argument can be made to look absurd when it is stated in a simplified form that leaves out important qualifications or subtle distinctions. Third, one may *extend* it beyond its original bounds. This can be done by drawing inferences from it that are clearly unwarranted or unintended.

The principle of charity obligates us to represent fairly the arguments of others. Since a misrepresentation of another's argument or position is an unfair treatment of it, the straw-man attack should be regarded as a violation of not only the rebuttal principle but the principle of charity as well.

EXAMPLE Deliberate distortion of an opponent's view is a typical technique of politicians. If Senator Coulthard proposes a decrease in the national defense budget that will be accomplished by cutting out waste and reducing mismanagement, his political opponent might respond: "The proposal of my distinguished colleague from the state of Virginia wants to cut our military budget in a way that fails to support our troops in the Middle East and would undercut our defense posture

around the world. I say that we must not do something that would make us into a second-rate military power and thus prevent us from keeping our commitments abroad.” Let us convert this argument into standard form:

Since Senator Coulthard wants to decrease defense spending, (premise)
 and this would fail to support our troops in the Middle East, (premise)
 and weaken our military position around the world, (premise)
 and we would not be able to keep our commitments abroad, (premise)
 because we would become a second-rate military power, (subpremise)
 [and since we *should* support our troops and *should not* weaken our military
 position around the world,] (implicit moral premise)
 and we *should* keep our commitments abroad,] (implicit moral premise)
 [Therefore, we should not adopt the senator’s proposal.] (implicit conclusion)

This example shows not only how a position may be misrepresented but also how it may be unfairly extended beyond its original bounds. Cutting out waste in defense spending does not necessarily entail not supporting the troops, weakening our military position around the world, or failing to keep our commitments abroad, but the senator’s opponent has tried to make it appear that those things are a part of the senator’s plan and then proceeds to implicitly attack those added strawlike parts. If Senator Coulthard had been given the opportunity to reconstruct his own argument, it would not have looked like his critic’s misrepresentation of it.

EXAMPLE A very clear case of misrepresentation that involves drawing unwarranted inferences can be seen in this short exchange between a proponent and an opponent of a plan to construct a new power-generating dam.

MARCIA: Unless we build a power plant in this area within the next ten years, we won’t be able to meet the significantly growing demand for electrical power.

DAVID: What you’re saying is that you couldn’t care less what happens to the plant life and wildlife in this area or even to human lives that might be dislocated by the building of this dam.

David has drawn an inference from Marcia’s argument that is clearly unwarranted. In no way could one conclude from her argument that she is unconcerned about the possible environmental dangers and other disruptions that would be created by building the plant.

EXAMPLE Critics of the Supreme Court’s decision on school prayer distort the view of its defenders by claiming that it prohibits *any* prayer in public schools, while in fact it only prohibits a public school from *endorsing* or *requiring* a religious ceremony. But the critics leave out that important qualification. Similarly, critics of a court decision prohibiting the display of the Ten Commandments in public buildings distort the argument of the court by claiming that the Ten Commandments are simply moral guidelines, a public display of which would serve a public good. However, to refer to the Ten Commandments simply as moral guidelines is a misrepresentation of the court’s view, since it observed that the first four commandments deal with very specific

religious demands, including one that requires exclusive commitment to the Judeo-Christian God. In both of these cases, arguers have constructed straw men to attack rather than to evaluate the real positions that the arguments of their opponents support.

ATTACKING THE FALLACY It is not always possible to know whether an opponent has deliberately distorted your argument or has simply failed to understand or interpret it in the way that you intended. For this reason, it might be helpful to recapitulate the basic outline of any lengthy criticism or argument you may present or, better yet, ask your opponent to summarize it for you. If he or she is willing to do so, you will be in a better position to correct any misinterpretation, misrepresentation, or omission.

If you have the opportunity, you should insist that a fruitful or constructive debate is not possible unless both sides make every attempt to understand what is being said. If your opponent continues to misrepresent your position, call attention to that fact and correct the distortion in each counterresponse. In no case should you debate the issue on the distorter's terms, by allowing yourself to be forced into defending a misrepresented version of your position.

TRIVIAL OBJECTIONS

DEFINITION *Attacking an opponent's position by focusing critical attention on a minor point in the argument.*

The most likely time for the appearance of trivial objections is when the basic argument appears to be a strong one. In fact, you might take it as a good sign that you have expressed a strong point in a discussion when trivial objections to it rear their heads.

The fallacy of trivial objections can take several different forms. It may be an attack against a premise in an argument or criticism that provides no significant support for the position. It may be an attack on a minor or insignificant detail that has no bearing on the main point of the argument or criticism. It may even be an attack upon an illustration used. In each case, the basic argument or criticism remains intact because even if the objection has some merit, it is a trivial one.

The fallacy of trivial objections is not an attack on a misrepresentation or a weakened version of an opponent's argument or criticism; it is simply an attack on a minor flaw in it. But those who commit this fallacy treat the minor flaw as if it were a major one. If they can concentrate on this trivial problem, they can perhaps divert attention away from their inability to do serious damage to the major points in the argument or criticism.

EXAMPLE "It's not that I haven't looked carefully at Christianity, Joe, but I just can't swallow that stuff about Jesus walking on water or turning water into wine. You and I both know that's empirically impossible." The argument, when put into standard form, looks like this:

Since I have looked carefully at the argument for the Christian faith, (premise)
 and included in the narrative about Christianity in the New Testament are
 stories about Jesus walking on water and changing water into wine, (premise)
 and such miracles are empirically impossible, (premise)

Therefore, the Christian faith is an indefensible position. (conclusion)

The speaker is surely raising trivial objections, for these are clearly some of the least significant features of the Christian perspective—at least for most nonliteralists. Indeed, they would probably not even qualify as weak supports. A successful attack on these features, then, would have no significant negative effect on the argument for the Christian faith. Because the critic has not satisfied the rebuttal principle by addressing the strongest features of the case for Christianity, the conclusion does not follow.

EXAMPLE

SUZANNE: Walking is one of the best kinds of exercise you can get. One should walk rather than drive whenever possible. For example, rather than drive over to the cafeteria to eat lunch, it would be more beneficial to your health to walk.

SHERELL: But I don't eat at the cafeteria.

Sherell is attacking an illustration that Suzanne used to make her point. The fact that the specific illustration does not fit in Sherell's case is irrelevant to the basic thrust of the argument about the benefits of walking.

EXAMPLE

SETH: I don't understand why you failed me in philosophy this term.

PROFESSOR PROVOST: I think I can explain that very well. As you know, you failed the first test I gave, you were caught cheating on the last test, and you neglected to turn in any of the written assignments. Besides, I don't think you ever contributed *anything* to class discussion.

SETH: I thought you knew why I didn't talk in class. My physician gave me strict orders to keep my talking to an absolute minimum because of some growths on my vocal cords.

PROFESSOR PROVOST: Oh, I didn't know about that. I can see now why you didn't speak up in class, and under the circumstances, you could not have been expected to. How is your throat now?

SETH: Fine. But the important point is that you have admitted that your evaluation of my performance in your course was based on a false understanding, so I shouldn't have failed the course. Right?

Wrong! Seth has blunted only the weakest point in Professor Provost's argument for failing him—his lack of contribution to class discussion.

ATTACKING THE FALLACY If a critic points out a minor problem in your argument, you would do well to acknowledge it. But do not hesitate to point out that the strongest supports for your position are still intact and that you would be interested in hearing a response to *them*. If the critic insists that the objections raised are not trivial and do indeed damage the argument, ask for an explanation of

exactly how the matters raised have any significant bearing on the merit of the basic position you are defending.

One way to effectively disarm an opponent is to make clear in advance which are your strongest and which are your weakest supports for your claim. If the arguer then chooses to attack one of your weaker supports, you will have already acknowledged that it is a weak support, so whatever damage it may cause will probably not significantly affect the quality of your argument.

RED HERRING

DEFINITION *Attempting to hide the weakness of a position by drawing attention away from the real issue to a side issue.*

One of the explanations of the strange name of this fallacy comes from the sport of fox hunting. A herring is cooked to a brownish-red color and its strong smell is used to train dogs to follow a scent, but it is also dragged *across* the fox's trail in order to test the dogs' ability to follow the fox scent. Dogs that can be easily pulled off the scent are not ready for the real hunt. In argument, using a red herring means steering a debate away from one issue to a different, perhaps related, issue in such a way as to make it appear that the related issue is relevant to the issue at hand, but primarily as a means of avoiding the obligation to address the main issue or criticism.

EXAMPLE A very common way of committing the red herring fallacy is to draw attention away from an argument or criticism that involves an undesirable situation by claiming that one should be satisfied with such a situation because "things could be worse." Many of us have had the experience of complaining about the low or unfair wages we receive for our labors, only to be told by a parent or some older person, "Well, you could be making \$35 a week as I did when I was your age." Although it is true that "things" could almost always be worse than they are, that is not the issue, and drawing attention to such a notion is simply a way to divert attention from the main point under discussion and thus avoid the responsibility for dealing with it.

EXAMPLE

SENATOR YATES: Why aren't you willing to support my antiabortion amendment? Don't you have any feelings at all for the unborn children whose lives are being indiscriminately blotted out?

SENATOR WEBB: Yes, I do. That's why I don't understand why those of you who are so concerned about lives being blotted out by abortion don't have the same feelings about the thousands of lives that are blotted out every year by the indiscriminate use of handguns. Isn't the issue of the sanctity of human life involved in both issues? Why haven't you supported us in our efforts at gun-control legislation?

Let us convert Senator Webb's argument into standard form:

Since you wish me to join you in support of an antiabortion amendment to the Constitution, (premise)

because abortion destroys many human lives, (subpremise)
 and I am puzzled that you have not joined me in support of gun-control legislation, (premise)

because a lack of gun control also destroys many lives, (subpremise)
 Therefore, your nonsupport of gun control seems like you are being contradictory. (implicit conclusion)

Senator Webb's concern here is no doubt a very important one, and his "conclusion" or observation about inconsistency may be very insightful, but he does not answer the question at issue, which is why he is not supporting the antiabortion amendment. The issue of gun control and its possible connection to the issue of sanctity of life may be addressed on another day, but in this context it should be seen as a red herring, in that it inappropriately directs attention away from addressing the primary issue.

EXAMPLE

PETER: I'm convinced that your proposal to adopt an honor code here at Thompson College just won't work. We don't have a tradition for it. Even institutions like West Point that have had a long history with an honor code are finding it difficult to maintain.

ANNE: But don't you agree that the honor code has worked well in the past for many institutions that have used it? And you can't deny that those who have lived under such a code have a genuine respect for it. If we had such a code here at Thompson, we would be numbered among some of the most elite institutions in this country.

Anne has not addressed Peter's concerns or criticisms. The issue is not whether the honor code has worked well in the past at certain institutions or whether it would place Thompson College among the most elite institutions in the country. Those are red herrings that are made to appear to be relevant considerations in the discussion of the real issue, which is whether the honor code should now be initiated by an institution that has no tradition for it.

ATTACKING THE FALLACY Red herrings creep very subtly into many arguments. And to keep the focus of a discussion from being maneuvered to a side one requires constant surveillance. Moreover, a simple reminder of "that's not the issue we're talking about" may often be mildly irritating to an opponent, who may honestly believe that his or her point *is* on topic. Therefore, you should be prepared to explain exactly how the focus on the main issue has been sidetracked or why a certain issue may appropriately be identified as a red herring.

Since red herrings are often not consciously, or at least not deliberately, dragged into a discussion, one should perhaps be cautious about accusing an opponent of committing this fallacy. If the swerve to the side is innocent, you should treat it as such. You would do well to save the charge of "red herring" for those who use it as a deliberate diversionary device to avoid addressing the strongest points of an argument or criticism.

RESORT TO HUMOR OR RIDICULE

DEFINITION *Injecting humor or ridicule into an argument in an effort to cover up an inability or unwillingness to respond appropriately to an opponent's criticism or counterargument.*

Humor is a very effective diversionary tactic because a clever and well-delivered remark can quickly blunt the force of an opponent's argumentative advantage, particularly in the minds of an audience, toward whom such humor is often directed. Moreover, it can quickly bring an audience over to one's own side, even though there is no logical justification for such a shift.

Diversionary humor can take a number of different forms. It may be a pun created from a remark in an opponent's proposal or argument, a not-so-serious response to a serious claim or question, a humorous anecdote, or just plain ridicule of an opponent's position or remarks. Most arguers who use this tactic are very much aware of its diversionary effect. They are, in effect, using a joke, pun, or bit of ridicule as a means of ignoring or discrediting the criticism or argument. By doing so, they violate the rebuttal criterion, which requires that they effectively *rebut* the substantive point in a criticism or argument. Making fun of or ridiculing an argument or its author is clearly not a way of meeting the rebuttal criterion of a good argument.

EXAMPLE Imagine the following conversation between a third-party presidential candidate and a young reporter at a news conference.

REPORTER: It seems to me that if you were elected president as a third-party candidate, the Congress with which you would have to work could be very uncooperative. How could you, as president, bring about any reform or help enact any beneficial legislation with a Congress dominated by the two main parties that oppose your programs?

THIRD-PARTY CANDIDATE: Well, if I were elected, about half the members of Congress would drop dead of heart attacks, and half of my problem would be solved from the outset.

Let us convert the candidate's humorous response into the standard form of an argument:

[Since I would have a problem dealing with an uncooperative Congress if I were elected president,] (implicit premise)

and since half the members of Congress would die of heart attacks if I were elected president, (premise)

Therefore, half of my problem of dealing with an uncooperative Congress would be solved. (conclusion)

The candidate's conclusion does not follow from the joke premise that half of the members would die of heart attacks because *that* is not going to happen. The candidate is simply trying to use humor to dodge the reporter's question, although it seems to be one that deserves a serious response.

EXAMPLE During the 1984 presidential race, President Reagan's age was an issue of concern to many people. During one of the presidential debates on television with the former Vice President Walter Mondale, a panelist asked Reagan whether there was any doubt in his mind, despite his age, that he would be able to handle a national security issue akin to the Cuban missile crisis, during which President Kennedy got very little sleep for several days. "Not at all," replied Reagan. He then added: "I will not make age an issue of this campaign. I am not going to exploit, for political purposes, my opponent's youth and inexperience." The extended laughter from the panel of reporters and the audience had the effect of defusing the age issue and prevented any further discussion about it.

EXAMPLE When a philosophy major noticed that his political science professor had used a questionable *contrary-to-fact hypothesis* in her analysis of a particular issue in class, he confronted her with it. Rather than examining the charge to determine whether it was justifiable, the professor tried to blunt the force of the charge by saying: "Well, Socrates must have slipped into our class while we weren't looking. Now what did you say I did? Used a contrary-to-fact what? I didn't think philosophers were concerned about facts." Since the other class members were amused by her ridicule of the student, the professor was able to avoid facing squarely the charge against the soundness of her reasoning.

ATTACKING THE FALLACY If a humorous intrusion into an argumentative context is genuinely clever, you could perhaps show appropriate appreciation of it, for sound arguments need not be totally cheerless. A response in kind might even be an effective move, as a means of leveling the field of play. At the appropriate moment, however, you should reiterate the basic claim or criticism at issue and insist on a serious response.

ASSIGNMENTS

C. Fallacies of Diversion For each of the following arguments, (1) identify the type of diversionary fallacy illustrated, and (2) explain how the reasoning violates the rebuttal criterion. There are two examples of each fallacy discussed in this section. Arguments marked with an asterisk (*) have sample answers at the end of the text.

- *1. **STUDENT:** The opinions of the students are completely ignored in the process of determining both curricular changes and social programs. The students should have a much greater voice in campus governance, because we have a very great stake in this institution, and we think that we have a positive contribution to make.
- PROFESSOR:** The faculty are the ones who need a greater voice. Professors can be fired without explanation, and they have no control over who is promoted or given tenure. Their opinions about budgetary allotments are completely ignored. Why aren't you concerned about the injustice the *faculty* is experiencing?
- *2. **SUSAN:** Congressman, in spite of the landmark Supreme Court decision prohibiting state-sponsored prayer in public schools, there is still prayer going on in the schools. It seems to me that the spirit of the court decision is still being violated after all these years. The state is still sponsoring the prayer, even though schools

claim that it is the students who initiate it. There are prayers in assemblies, before athletic games, even before classes. And the teachers and coaches are participating in them. It's almost like there is more prayer than there was before. What do you think can be done about it?

CONGRESSMAN CREED: I think that as long as there are math tests in school, there will always be prayer in school.

- *3. **PROFESSOR LANG:** It doesn't make much sense any more to prepare for a specific vocation during college. In a technological age, change happens so rapidly that job training usually becomes obsolete within eight years. I suggest that we maintain a strong nonvocationally oriented, liberal arts curriculum. That way, our students will be prepared to go in a number of different vocational directions.

PROFESSOR REID: I'm not so sure, John. I think there are a lot of technological jobs that last longer than eight years.

4. You shouldn't complain about not being able to find a parking place near your classroom. When I went to college, we weren't even allowed to have cars on campus.

5. **MOTHER:** I think it would be a good idea for us to encourage the children to watch less television and to get more physical exercise.

FATHER: You think I've let the kids become a bunch of lazy, unhealthy television addicts, don't you?

- *6. **DAUGHTER:** If two people really love each other and have committed themselves to each other, I don't see any reason why they shouldn't live together. Tom and I really do love each other, Mother. Someday we may get married, but right now we simply want to be close to each other.

MOTHER: The way I see it, you're just looking for an excuse to go to bed together. Your whole attitude about this thing makes sex something cheap!

7. **CHALLENGER:** If I am elected, I promise to do everything I can to make our streets safe enough that our wives can walk the streets at night.

INCUMBENT: Is that what you want to do—make hookers out of our wives?

8. **PROFESSOR WILSON:** I think the administration is entirely justified in dismissing Professor Frederick. He's never prepared for his lectures, he makes off-color remarks to his female students, he grades arbitrarily, and he isn't even very friendly.

PROFESSOR DAY: I disagree. He's very friendly to me; he says "hello" to me every time I see him.

D. For each of the following arguments (1) identify, from among all the fallacies studied in this chapter, the fallacy illustrated, and (2) explain how the reasoning violates the rebuttal criterion. There are two examples of each of the fallacies discussed in this chapter.

1. **MAY JO:** People would be a lot healthier if they used fish and poultry as their main sources of protein.

SAM: But some people are *allergic* to fish and poultry.

2. If I had a choice, Joan, I would rent an apartment rather than buy a house. House payments are much higher than apartment rents for about the same amount of living space. But even more important, you don't have to cut the grass, rake the leaves, or get out the old paintbrush when the paint begins to peel. If anything breaks, you just call "maintenance" to fix it. You don't have to buy and repair appliances; they usually come with the apartment. You also

- don't have to pay taxes or insurance. Why would you want to buy a house?
3. I know you haven't had a raise in three years, but you remember, don't you, that last year we gave you the biggest and nicest office on this floor of the building.
 4. **PHILIP:** Aren't you going to put on some sunblock before you go out on the beach? Recent articles in a number of prestigious medical journals say that the sun's rays, whether they burn or not, can cause skin cancer.
KATHLEEN: I don't care what the doctors say. The doctors can be wrong. Unblocked sun gives me a great tan, and anything that makes me look and feel this good has to be good for me.
 5. **JOE:** I believe that if we create a minority seat in the Student Senate, there would be better representation for the student body and more diversity of opinion expressed. We African Americans have never felt like we were inadequately represented here.
WADE: But you knew how things were here before you came. You could have gone to some other school that would have been more to your liking.
 6. **DR. CARMACK:** You really shouldn't be smoking that much, Ms. Buckner. Not only is it likely to cause you to get cancer, but since you smoke around others, it's damaging to the health of family and coworkers.
MS. BUCKNER: I noticed that you put out your cigarette just as you were entering the examining room, Dr. Carmack. Obviously *you* don't believe those things, so why should I?
 7. **SUPERVISOR:** I'm going to have to let Terri go. She's almost always late for work, she makes frequent costly errors, she spends a lot of time making personal phone calls, and personally, I don't think she dresses appropriately for our kind of business.
EMPLOYEE: I don't think that wearing blue jeans once in a while is reason enough to fire someone.
 8. **MOTHER:** Have a good time, son, and don't forget to wear your bike helmet.
SON: Why should I? When you ride with me, you don't wear one. You don't even *own* a helmet.
 9. The army certainly doesn't seem like an attractive option to me at all. You have to be up at the crack of dawn, and you are under someone's direct command twenty-four hours a day. You're rarely allowed to think for yourself; most things are decided for you. Besides, the physical demands can be awful. Have you thought about that?
 10. **FATHER:** I think Grandma might be better cared for in a nice nursing home.
SON: What you're saying is that you're tired of taking care of her—that she's a burden to you.
 11. The lieutenant governor's plan for reform of the procedures for dealing with victims in rape trials can't be taken seriously. You know that his wife was raped last fall, don't you?
 12. **BARBARA:** Parents who are afraid that talking to their children about birth control will encourage them to have sex are just being naive. Young people are having sex much earlier than they did in our generation. And getting pregnant is always a real possibility. Parents need to have a serious talk with their children about contraceptives.
LAWRENCE: I don't understand. What could your children teach you about contraceptives that you don't already know?
 13. **PROSECUTION EXPERT WITNESS:** It is my considered opinion, as a practicing psychiatrist, that the defendant is as sane as any member of the jury.

DEFENSE ATTORNEY: How many of these insanity defense trials do you do each year, Dr. Qualls? How much do you get paid for these gigs? Have you ever found a defendant *insane* as you travel all over the state testifying for the prosecution in insanity trials? When do you have time to practice your profession, Doctor?

Couldn't you be getting a bit rusty, since you spend so much time looking at only *one side* of an issue? No more questions, your honor.

14. You have never been in military service, so how can your argument about gays in the military be taken seriously?

15. **JOE:** But all studies and every expert say that you can't get the AIDS virus from casual contact.

CHARLIE: I don't care what the studies say. I'm not going to touch anyone who has AIDS. I don't intend to die because of what some study says.

16. **FORREST:** The Supreme Court was wrong in allowing sodomy in the Texas case. The state laws against sodomy should stay just as they were. Sodomy is against the laws of nature. Sodomy never produced a single human life.

BILL: Oh yeah? Then apparently you haven't met my ex-wife's attorney.

17. **SENATOR BUCKLES:** I think that to impose these standards on the automotive industry by next year would put the American auto industry at a disadvantage in the world automobile market.

SENATOR FINNEY: It's not surprising that you would side with the automakers in their fight against tougher environmental standards. You've never really cared about the environment, anyway. You only pretended that you were concerned about the environment to get elected. You couldn't care less, could you?

18. **JOY:** After listening to both candidates, I think that Ms. Gaia is better qualified for the job.

DENNIS: In other words, you're voting for her because she's a woman.

E. Submit the best argument possible (in essay form) that represents your own position on a current controversial issue selected by the class. Be particularly careful to provide a rebuttal to the strongest arguments against your argument or the position it supports or against the argument for an alternative position. Bring photocopies of your argument to give to each of the other students. After all position arguments have been read, use class time to conduct a rational discussion in accordance with the principles outlined in the "Code of Conduct for Effective Discussion" (see Chapter 1), with the goal of coming to a rational consensus about the most defensible position on the issue.

F. Use a 3-by-5 card to submit an original example (found or created) of each of the fallacies that violate the rebuttal criterion, and then create your own strategies or suggestions for attacking each of them.

G. At the end of the last chapter you were asked to identify each of the sufficiency-related fallacies committed by Dad in his fourth email to Jim. In this last of five emails, Dad commits each of the nine fallacies that violate the rebuttal criterion discussed in this chapter. Each of the fallacies is committed only one time, and each number represents the presence of a named fallacy immediately preceding it. Identify by name each of the fallacies committed:

Dear Jim,

Thanks for your email today, Jim. I take your concerns very seriously, and I know that I sound pretty hard on philosophers, but they deserve my criticisms. You need to keep in mind that these philosophers who demand that you have evidence for your beliefs are just atheists who couldn't care less about you or your eternal destiny. They are just professional troublemakers. (1) Philosophers and their scientific comrades have convinced a lot of people to accept the so-called evolutionary view that the universe came from a bunch of chemicals accidentally colliding together. (2) Let me tell you that there is just no way that the human mind could just come into existence on its own. (3)

In any case, philosophers are clearly involved in a giant contradiction. As I clearly demonstrated in a previous email, philosophers base their whole case on their total faith in science and reason, even though they claim that one shouldn't accept something simply on faith. They say one thing and do another, so we should hardly take their arguments seriously. (4) Reason and science are simply unreliable, because we know that in the past they have led people to draw what turned out to be false conclusions. (5) You can see this in what the scientists recently did with the planet Pluto. Science has always said that it was a planet. Then suddenly at one of their conferences a few years ago they voted on the question and concluded it wasn't a planet after all. Do they really expect us to believe that Pluto isn't a planet just because they decided by majority vote that it wasn't? (6)

Anyway, all I'm saying is that you need to be constantly alert to the philosopher's tricks. Don't listen to those who tell you something different from what I'm telling you. They are wrong! I have looked at this whole issue very carefully, and there is nothing to suggest that there is any serious doubt about the existence of God. (7) Besides, if philosophers have never tried the approach of faith, we really shouldn't even be listening to what any of them say on the subject of faith. (8)

Nevertheless, I have listened, but I have found nothing in what they have to say to write heaven about. I don't mean to wish them any harm, but when the teachers of philosophy, along with their condescending smirks, are in the end "left behind," maybe justice will prevail and they will be riding in the passenger seat of a car driven by one of their students not yet corrupted by them. (9)

We'll have plenty of time to talk about all these matters when you come for the Christmas break in a week or so. Like me, you just need to keep an open mind.

Love,
Dad

H. Assume the role of Jim and write an email to Dad that responds to or attacks his poor reasoning in one of the above email's paragraphs. Try to attack each fallacy committed without using the actual *name* of the fallacy. Use the skills you have learned from the "Attacking the Fallacy" sections throughout the text to make your case.

| WRITING THE
ARGUMENTATIVE
ESSAY

This chapter should help you to:

Understand and become actively involved in following the basic steps in writing a longer argumentative essay.

Incorporate the elements of a good argument learned in this book in a focused attempt to resolve a controversial issue.

The ability to construct an argument that convinces others of a particular view is a highly desirable skill. Without that skill, we are at a great disadvantage in many areas of our lives. In almost any role we play in our society, we are called upon to construct arguments defending our views. We may have to defend a proposal in a committee or group meeting, decide whether to make a major purchase, consider a change in jobs, choose between candidates for political office, or determine whether to get married. We also construct arguments as a means of resolving disagreements with parents, spouses, children, neighbors, parents, bosses, teachers, students, and customer service representatives. We daily construct arguments for ourselves and others on moral, religious, political, and entertainment issues. This text has presented insights and strategies for performing those tasks effectively. It now behooves us to bring these ideas together to provide some helpful guidelines for writing an argumentative essay.

Writing an argumentative essay entails five basic steps: researching the issue, stating your position on the issue, arguing for your position, rebutting objections to your position, and resolving the issue. The outline of such an essay might look like this:

1. Explanation of the issue
2. Statement of your position on the issue
3. Argument in support of your position
4. Rebuttal of anticipated criticisms
5. Resolution of the issue

RESEARCHING THE ISSUE

The first step in constructing an extended argument or writing an argumentative essay is to become thoroughly acquainted with the complexity of the issue at stake. Your concern should not be that of defending the position that you may already have on an issue; your goal is to discover which of the available positions on the question is the most defensible one. It is not unlikely that researching the question may cause you to discard your original position.

Good preparation involves looking at all sides of an issue. Not only does this guide you in determining which position to defend, it acquaints you with the possible arguments for or against that position. It also acquaints you with alternative positions on the question and the reasons that are used in support of them. Most important, you will become aware of the major criticisms of your position and the arguments supporting it, which you must effectively rebut as a part of your essay.

In preparation for writing an argument, it might be a good idea to start an “idea file” in your computer, dividing it into the five sections of the suggested outline of an argumentative essay shown above. As you read about the issue, conduct research on the Internet, and talk with others about the topic, write down ideas as they occur to you and place them in the appropriate section of the file. From time to time, you may want to reorganize these notes; you may decide to delete some ideas, expand or amend others, or make connections between the parts of your outline as you witness the major features of your essay slowly emerge.

STATING YOUR POSITION

Before presenting your argument for your position, it is a good idea to indicate why the question at issue is an important one. The very fact that you are writing an argumentative essay suggests that there is an important unresolved or open question to be addressed. If it is a problem to be solved, you should make it clear that you believe your proposal will help solve it.

After you have carefully discussed the importance of the issue, you should state your position on it right at the beginning of the essay. This should be done similarly to the way a prosecutor does in an opening statement at the beginning of a trial. Your research has already led you to the conclusion you will be defending, so you should declare it as quickly and as simply as possible. There is no need to spend a lot of space up front addressing the complexity of the issue. The complex nature of the question will become sufficiently clear as you present your argument in support of your position.

You should be very precise in the way you state your position on the question. Use language that is free of vagueness, not subject to multiple interpretations, and

no more technical in nature than is absolutely necessary. Define or explain key terms or concepts that you use in your stated position. Finally, properly qualify the statement of your position. That is, if there are possible exceptions that you are willing to make, identify them as a part of the position. Failure to do so could make an otherwise good argument a very poor one. Also, such qualification will often strengthen your position and make it less vulnerable to attacks from your critics. Finally, your position should not promise more than it can deliver in terms of solving the problem addressed.

As a general rule, do not assume anything about the person reading your essay other than the fact that he or she is an adult who is reasonably acquainted with commonly known features of the world. Explain all concepts, terms, and ideas that are not a part of a high school graduate's general knowledge. Above all, do not write as if only your professor were reading the essay and that you don't need to explain certain terms or concepts because you think the reader "already knows them." Instead, envision the reader as a fellow student who is not necessarily familiar with the specific features of your chosen intellectual field of inquiry.

ARGUING FOR YOUR POSITION

The section in which you argue for your position is the most critical part of your essay. Here is where you will present the argument in support of your stated position. You may even want to introduce this section by saying something like, "And the main argument for my position is . . ." In most cases, the stated position and the conclusion of the argument supporting it are the same claim. If you have more than one argument for your position, however, present them one at a time and make it clear to the reader each time you move to a different argument. Typically, you should use one paragraph for each premise in your argument so that the reader is less likely to be confused about the parts of the argument. Keep in mind that everything you say should help support the position, so you should not include any extraneous material, even if it would make the essay more entertaining or colorful.

Set forth the strongest evidence you have in support of your conclusion, making all your premises as explicit as possible and arranging them so that they flow from one to the next in logical order. Use examples sparingly so that the reader is less likely to confuse an illustration with a part of the argument. Also, if possible, try to make your argument a deductive one, so as to increase the relative strength of the argument. Finally, if your conclusion or position is a moral (or aesthetic) judgment, make sure that your argument supports it by including a carefully crafted moral (or aesthetic) premise. Otherwise, you cannot legitimately draw such a value judgment.

If you think that one of your premises may be weak or if you anticipate that a critic may raise an objection about a particular premise, you may want to provide some additional support to that premise. If you think your critic's objection is not damaging, point out what you believe to be the weakness in the objection and show how the premise in question satisfactorily meets the articulated "standards of acceptability." If it is a powerful criticism, and you have no effective response to it, you should not be using that premise in the first place. Eliminate it and replace

it with a stronger one. Objections to the argument's *conclusion*, which is usually the same as the stated position, are best addressed in the rebuttal section of the essay.

In presenting the argument for your position, you should always be guided in the argument's construction by the five criteria of a good argument. A good argument for a position must satisfy every one of them. The first of these is the *structural criterion*. A good argument must meet the fundamental structural requirements of a well-formed argument, using premises that are compatible with one another, that do not contradict the conclusion, that do not assume the truth of the conclusion, and that are not involved in any faulty deductive inference.

The second criterion of a good argument is the *relevance criterion*. A good argument should attempt to set forth only reasons that are directly related to the merit of the conclusion or position at issue. A premise is relevant if its truth or acceptance provides some reason to believe, counts in favor of, or has some bearing on the truth of the conclusion.

The third criterion of a good argument is the *acceptability criterion*. A good argument uses premises that are likely to be accepted by the audience or at least likely to be accepted by a rational person. To get your audience to accept the position defended in your essay, you need to use premises that would be more acceptable to your audience than the conclusion the premises support.

The fourth criterion of a good argument is the *sufficiency criterion*. A good argument should provide a sufficient number of relevant and acceptable premises of the appropriate kind and weight that together are sufficient to lead one to its conclusion. Almost every argumentative context is different, and the more experienced you are in a particular context, the more likely it is that you will have a feel for what constitutes sufficient evidence in that situation.

REBUTTING OBJECTIONS TO YOUR POSITION

The fifth criterion of a good argument, the *rebuttal criterion*, deserves a special status in the argumentative essay. A good argument should provide an effective rebuttal to all serious challenges to the argument and the position it supports. This is the most neglected feature of arguments in general and argumentative essays in particular. Almost any arguer can find relevant and acceptable premises as well as what appear to be a sufficient number of premises to support a conclusion, but such an argument would not be a good one unless it could also effectively answer those who challenge its merit.

You should anticipate criticisms of your argument or position and include your effective rebuttal to them as a part of your essay. If you do not have an effective response to these criticisms of your position, you probably should not be defending that position. You should have discovered this during the research phase of the argumentative essay assignment.

In a comprehensive argumentative essay, you also should be able to identify flaws in those arguments supporting alternative positions on the issue. This means, of course, that only one position can be the most defensible position on the question. Since it may not be possible to provide a fatal argument against each of the alternative positions, however, the most appropriate way of dealing with these less defensible alternatives is to make it clear that the argument for your position comes

closer to successfully meeting all the criteria of a good argument than the arguments for the alternative positions.

RESOLVING THE ISSUE

Since you will have stated the conclusion of the essay at the beginning of the essay, you probably do not have to state it again at the end. However, you probably *will* want to show how the position you have defended resolves the question, solves the problem, or settles the conflict, which was the main impetus for writing the essay. You might also point out how the argument successfully meets all the conditions of a good argument, including the effective rebuttal of criticisms of your argument, the position it supports, and the arguments for the strongest alternative positions. Finally, you may wish to suggest areas related to the question where further inquiry may be usefully conducted; but do not leave the reader with any doubt about where you stand on the issue.

SAMPLE ARGUMENTATIVE ESSAY

The following argumentative essay incorporates the suggested features of a well-constructed essay outlined above. The issue is one on which my wife and I have done a considerable amount of research. The essay explains the issue and its importance, states our position on the issue, presents our argument for the position, answers objections to our argument and the position its supports, addresses problems with the primary alternative position, and, in our judgment, resolves the issue.

A MARRIED WOMAN'S NAME

We have made great progress toward the goal of becoming a nonsexist society. However, there is one sexist feature of our culture that remains relatively unchanged. The overwhelming majority of women still take their husbands' names when they marry. We believe that this custom of a woman's taking her husband's name is a morally questionable one that should be abandoned in favor of a woman's keeping her own name. Contrary to the opinion of many, the practice of taking a husband's name at marriage is merely custom, not law. No state or local government requires such an action; it is simply a custom carried over from seventeenth-century property and inheritance laws in England.

The fact that it is a custom, however, does not determine whether it is morally acceptable. A married woman's choice of surname should not be simply a matter of personal taste. To change or not to change her name is a serious moral question, since the practice of a woman changing her name to that of her husband violates a number of moral principles and results in harmful consequences for at least half of our society. It is a sexist practice that is both discriminatory and exploitive. It is discriminatory in the sense that it imposes a requirement on women but not on men; and it is exploitive in the sense that it is used to serve the interests of men, not the women involved.

Any attempt to focus an issue in moral terms requires some moral standard; for if something is immoral, it violates some rule or standard of conduct. John Rawls, a well-known contemporary moral philosopher, proposes such a standard. He suggests that in order to determine whether a practice is immoral, you should imaginatively blind

yourself to such things as your own social, economic, racial, or sexual status in the world. In other words, you place on yourself a kind of “veil of ignorance” or act as if you do not know whether you are rich or poor, male or female, or husband or wife. In such a state of mind, says Rawls, rational beings would determine a fair way of devising moral rules or societal laws. If we were blinded to our own present social status, whatever laws or norms we might propose and adopt would not be biased toward ourselves or the traditional way we do things. Instead, they would be designed so that, whatever we “turn out to be” (when we take off the veil), we would regard the proposed rules as both fair and rational. To apply the Rawlsian method to the issue before us, we might ask: How can we find a fair way of determining how names should be handled when two people marry? If we were to start from scratch and redesign the whole marriage naming system behind a veil of ignorance, it is not at all likely that we would design a plan similar to our customary way of doing it. Rational people in that imaginative state would no doubt propose that all parties simply maintain their own names throughout their lives.

There are a number of reasons for proposing this method as a replacement for the present one, where the woman usually takes her husband’s name. First, to take a husband’s name at marriage is to surrender one’s identity. Our name is the primary mark of our identity and is very closely tied to our awareness of ourselves as unique individuals. This is why keeping our own name is so very important to us, particularly in the marriage partnership. A woman who takes her husband’s name is no longer who she was, for she is now “Mrs. Him.” When the marriage officiant pronounces a couple “husband and wife,” only one of the two identities changes—the woman’s. If the two become one, the one is *he*. It is perhaps this tradition that has contributed to the fact that many women in our society have low self-esteem. A woman cannot be expected to have a secure sense of self-worth if that which identifies who she is, her name, is always subject to change, depending on the man to whom she is currently legally attached. But why should only women be subjected to such crises of identity? It seems very strange for a couple to profess to have an egalitarian marriage while consciously adopting “Mr. and Mrs. Him” as a symbol of their relationship. A married woman who *retains* her own name, however, will *not* find it necessary to explain to others that she is in an egalitarian marriage. Her name makes that point for her.

Second, a husband’s name attached to a wife is a symbol of patriarchy. No other feature of our culture calls attention to male dominance with more directness and frequency than does the custom of calling a married woman by her husband’s name. Moreover, every woman who displays this sexist symbol helps perpetuate the patriarchal character of the society. Every time she is introduced or introduces herself as “Mrs. Him,” she and the culture give their approval to the underlying implications of that sexist act. They are saying: The husband is clearly more important than the wife in our culture. To use a woman’s birth name in place of the sexist symbol of “Mr. and Mrs. Him” thus has the potential to help destroy patriarchy by contributing significantly to the balancing of the power relationship in marriage and ultimately in the society.

Third, the cultural expectation (and sometimes insistence) that a married woman take the name of her husband is a case of using a double standard. A double standard is a principle or a set of principles that is applied to one person or group differently from how it is applied to others, when there are no relevant reasons for doing so. A well-known way of exposing double standards is to employ what is called *the reversibility test*. In this case, such a test might ask of a man: “Would you find it acceptable if the practice in our society were for a man to change his name to that of his wife?”

Most men who are asked this question assert very emphatically that they would *not* change their names. Yet our society expects a woman to do just that.

Fourth, to adopt one's husband's name shows a lack of self-respect. One of the first indications that we give others of our own attitude toward ourselves is the way we introduce ourselves. When a woman introduces herself as "Mrs. Him," she has told us a great deal about herself. She has told us that she wants to be known primarily as the "wife of Him" and that she does not consider herself to be an equal with him. She thinks highly of her husband but not as highly of herself. Not only does such a woman devalue herself in this way, she also encourages a lack of respect for other women, especially those who are married.

Fifth, a woman who uses her husband's name as her own teaches a sexist lesson to her children. As soon as children are old enough to understand that Mommy used to have a different name, they typically ask: "Why do you and I have Daddy's name?" Neither Mommy nor Daddy can give a very satisfactory answer to that question. Any answer that they come up with is going to say to the child that daddies are more important. However, if a mother has retained her own name in the marriage, like the father has done, the children will see clearly that their parents have equal status in the family.

Many defenders of the tradition of taking a husband's name argue that marriage is a new entity and that a common name symbolizes that union. Marriage, to be sure, is a new venture and represents the commitment of two people to a relationship of mutual responsibility and trust. However, it is neither desirable nor accurate to describe it as a new entity. Many of us who are married find it important to maintain some sense of our own independence. We make special efforts not to treat our mates as extensions of ourselves. We have different tastes, ambitions, backgrounds, families, experiences, personalities, and possessions. And these differences should be respected. To belittle them would not make for a healthy marriage. Personal independence within marriage also helps us to maintain our own sense of individual worth—an individuality that is further enriched through one's special commitment to another person and to some common goals. Hence, the description of marriage as a submerging of the self into a larger whole seems antithetical to both the facts and the ideal.

Other defenders of the tradition argue that if a wife takes her husband's name, the family name will be carried on through the children. This practice, they say, gives a sense of continuity to the family—connecting it to its past and future. The "family name" that the arguer has in mind is, of course, the *husband's* family name. Hence, the argument is actually an argument for carrying on *his* name through the children. But the question at issue is whether there are good reasons why a *woman* should take her husband's name, and the carry-on-the-family-name argument has little to do with that matter. It seems fairly clear that the focus of the traditional concern is to carry on the family name of the husband and their *male* offspring.

Defenders also argue that the tradition resolves the problem of how to name the children. But again, this argument actually has little if any bearing on the question of what name a married *woman* should choose. If a couple is among the 25 percent or more of those who neither have nor plan to have children, the argument should carry no weight at all for a woman who is trying to decide whether to take her husband's name or to keep her own. Even if a couple plans to have children, the issue of naming the children is still beside the point. What to name the children should not be seen as a problem created by the *woman's* decision to maintain her own name in marriage. That issue should be treated independently of the issue of what name a married woman should use.

Finally, many defenders of the name-changing practice claim that it is simply a tradition and we ought to continue with a practice that has had such a long and respected history. But we must not forget that there is also a dark and negative side to many traditions. Powerful traditions can perpetuate injustices, and they are sometimes the largest obstacles on the path to better ways of doing things. To reveal a particular practice as having the status of a tradition therefore sheds no light on whether it is a good one or a bad one. Any positive aspects it may embody should be weighed against the damage it inflicts. If the damage is serious, as we have demonstrated in the case of a woman's taking her husband's name, then one must be willing to forsake that tradition.

ASSIGNMENTS

A. Write a two- to three-page page argumentative essay in accordance with the guidelines suggested in this chapter. The essay should set forth your personal position on a current controversial issue.

B. Make a photocopy of your argumentative essay for each person in the class so that your class members can evaluate it.

C. Reconstruct the essay "A Married Woman's Name" in standard form. Does the essay follow all the suggestions for writing an effective argumentative essay? Does it meet all the criteria of a good argument? Does it commit any known fallacies?

GLOSSARY OF FALLACIES

Abusive *Ad Hominem* *See Ad Hominem, Abusive*

Accent, Misleading Directing another person toward an unwarranted conclusion by placing improper or unusual emphasis on a word, phrase, or particular aspect of an issue or claim. This fallacy is sometimes committed by taking portions of another's statement out of their original context in a way that conveys an unintended meaning. (p. 126)

***Ad Hominem*, Abusive** Attacking one's opponent in a personal or abusive way as a means of ignoring or discrediting his or her criticism or argument. (p. 199)

Affirming the Consequent Affirming the consequent of a conditional statement and then inferring the affirmation of the antecedent. (p. 78)

Ambiguity Directing another person toward an unwarranted conclusion by presenting a claim or argument that uses a word, phrase, or grammatical construction that can be interpreted in two or more distinctly different ways, without making clear which meaning is intended. (p. 123)

Appeal to Common Opinion *See* Common Opinion, Appeal to

Appeal to Force or Threat *See* Force or Threat, Appeal to

Appeal to Irrelevant Authority *See* Authority, Appeal to Irrelevant

Appeal to Self-Interest *See* Self-Interest, Appeal to

Appeal to Tradition *See* Tradition, Appeal to

Arguing from Ignorance *See* Ignorance, Arguing from

Arguing in a Circle Either explicitly or implicitly asserting, in the premise of an argument, what is asserted in the conclusion of that argument. (p. 63)

Argument by Innuendo *See* Innuendo, Argument by

Attacking a Straw Man Misrepresenting an opponent's position or argument, usually for the purpose of making it easier to attack. (p. 204)

Authority, Appeal to Irrelevant Attempting to support a claim by appealing to the judgment of one who is not an authority in the field, the judgment of an unidentified authority, or the judgment of an authority who is likely to be biased. (p. 102)

Causal Oversimplification Oversimplifying the causal antecedents of an event by specifying causal factors that are insufficient to account for the event in question or by overemphasizing the role of one or more of those factors. (p. 178)

Common Cause, Neglect of a Failing to recognize that two seemingly related events may not be causally related at all, but rather are effects of a common cause. (p. 183)

Common Opinion, Appeal to Urging the acceptance of a position simply on the grounds that a large number of people accept it or urging the rejection of a position on the grounds that very few people accept it. (p. 104)

Complex Question Formulating a question in a way that inappropriately presupposes that a definite answer has already been given to an unasked question about an open issue or that treats a series of questions as if the same answer will be given to each of the questions in the series. (p. 67)

Composition, Fallacy of Assuming that what is true of the parts of a whole is therefore true of the whole. (p. 140)

Confusion of Cause and Effect Confusing the cause with the effect of an event. (p. 182)

Confusion of a Necessary with a Sufficient Condition Assuming that a necessary condition of an event is also a sufficient one. (p. 177)

Continuum, Fallacy of the Assuming that small movements or differences on a continuum between a thing and its contrary have a negligible effect and that to make definite distinctions between points on that line is impossible or at least arbitrary. (p. 137)

Contradiction Between Premise and Conclusion Drawing a conclusion that is incompatible with at least one of the premises. (p. 74)

Contrary-to-Fact Hypothesis Treating a hypothetical claim as if it were a statement of fact by making a claim, without sufficient evidence, about what would have happened in the past if other conditions had been present or about an event that will occur in the future. (p. 168)

Counterevidence, Denying the Refusing to consider seriously or unfairly minimizing the evidence that is brought against one's claim. (p. 194)

Counterevidence, Ignoring the Arguing in a way that ignores or omits any reference to important evidence unfavorable to one's position, giving the false impression that there is no significant evidence against it. (p. 195)

Denying the Antecedent Denying the antecedent of a conditional statement and then inferring the denial of the consequent. (p. 77)

Denying the Counterevidence *See* Counterevidence, Denying the

Distinction Without a Difference Attempting to defend an action or position as different from another one, with which it might be confused, by means of a careful distinction of language, when the action or position defended is no different in substance from the one from which it is linguistically distinguished. (p. 134)

Division, Fallacy of Assuming that what is true of a whole is therefore true of each of the parts of that whole. (p. 141)

Domino Fallacy Assuming, without appropriate evidence, that a particular action or event is just one, usually the first, in a series of steps that will lead inevitably to a specific, usually undesirable, consequence. (p. 185)

Drawing the Wrong Conclusion *See* Wrong Conclusion, Drawing the Emotions, Manipulation of *See* Manipulation of Emotions

End Term, Illicit Distribution of an Drawing a conclusion in a syllogism in which a distributed end term in the conclusion is not distributed in the premises. (p. 85)

Equivocation Directing another person toward an unwarranted conclusion by making a word or phrase employed in two different senses in an argument appear to have the same meaning throughout. (p. 121)

Fallacy of Division *See* Division, Fallacy of

Fallacy of Popular Wisdom *See* Popular Wisdom, Fallacy of

Fallacy of the Continuum *See* Continuum, Fallacy of

Fallacy of the Mean *See* Mean, Fallacy of

False Alternatives Restricting too severely the number of proposed alternative responses to a problem or situation and assuming that one of the suggested alternatives must be the true or the right one. (p. 143)

False Conversion Reversing the antecedent and consequent of a conditional statement or exchanging the subject and predicate terms in a universal affirmative statement and then inferring that these converted statements retain their original truth value. (p. 80)

Faulty Analogy Assuming that because two things are alike in one or more respects, they necessarily are alike in some other important respect, while failing to recognize the insignificance of their similarities and/or the significance of their dissimilarities. (p. 151)

Force or Threat, Appeal to Attempting to persuade others of a position by threatening them with an undesirable state of affairs instead of presenting evidence for one's view. (p. 106)

Gambler's Fallacy Arguing that because a chance event has had a certain run in the past, the probability of its occurrence in the future is significantly altered. (p. 186)

Genetic Fallacy Evaluating a thing in terms of its earlier context and then carrying over that evaluation to the thing in the present, while ignoring relevant changes that may have altered its character in the interim. (p. 93)

Humor or Ridicule, Resort to Injecting humor or ridicule into an argument in an effort to cover up an inability or unwillingness to respond appropriately to an opponent's criticism or counterargument. (p. 210)

Ignorance, Arguing from Arguing for the truth (or falsity) of a claim because there is no evidence or proof to the contrary or because of the inability or refusal of an opponent to present convincing evidence to the contrary. (p. 165)

Ignoring the Counterevidence *See* Counterevidence, Ignoring the

Illicit Contrast A listener's inferring from another's claim a related but unstated *contrasting* claim by improperly placing unusual emphasis on a word or phrase in the speaker's or writer's statement. (p. 128)

Illicit Distribution of an End Term *See* End Term, Illicit Distribution of an

Incompatible Premises Drawing a conclusion from inconsistent or incompatible premises. (p. 72)

Innuendo, Argument by Directing another person toward a particular, usually derogatory, conclusion by a skillful choice of words that implicitly *suggests* but does not assert that conclusion. (p. 129)

Insufficient Sample Drawing a conclusion or generalization from too small a sample of cases. (p. 161)

Irrelevant Authority *See* Authority, Appeal to Irrelevant.

Is-Ought Fallacy Assuming that because something is now the practice, it ought to be the practice. Conversely, assuming that because something is not now the practice, it ought not to be the practice. (p. 145)

Manipulation of Emotions Attempting to persuade others to accept a position by exploiting their emotions instead of presenting evidence for the position. (p. 111)

Mean, Fallacy of the Assuming that the moderate or middle view between two extremes must be the best or right one simply because it is the middle view. (p. 150)

Middle Term, Undistributed Drawing a conclusion in a syllogism in which the middle term in the premises is not distributed at least once. (p. 82)

Misleading Accent *See* Accent, Misleading

Misuse of a Principle *See* Principle, Misuse of a

Misuse of a Vague Expression *See* Vague Expression, Misuse of.

Neglect of a Common Cause *See* Common Cause, Neglect of a.

Omission of Key Evidence Constructing an argument that fails to include key evidence that is critical to the support of the conclusion. (p. 173)

Poisoning the Well Rejecting a criticism or argument presented by another person because of his or her personal circumstances or improper motives. (p. 200)

Popular Wisdom, Fallacy of Appealing to insights expressed in aphorisms or clichés, folk wisdom, or so-called common sense instead of to relevant evidence for a claim. (p. 169)

Post Hoc Fallacy Assuming that a particular event, B, is caused by another event, A, simply because B follows A in time. (p. 180)

Principle, Misuse of a Misapplying a principle or rule in a particular instance by assuming that it has no exceptions. Conversely, attempting to refute a principle or rule by means of an exceptional case. (p. 148)

Question-Begging Definition Using a highly questionable definition, disguised as an irrefutable empirical premise, which has the effect of making the empirical claim at issue true by definition. (p. 69)

Question-Begging Language Discussing an issue by means of language that assumes a position on the very question at issue, in such a way as to direct the listener to that same conclusion. (p. 65)

Rationalization Using plausible-sounding but usually fake reasons to justify a particular position that is held on other, less respectable grounds. (p. 95)

Red Herring Attempting to hide the weakness of a position by drawing attention away from the real issue to a side issue. (p. 208)

Resort to Humor or Ridicule *See* Humor or Ridicule, Resort to

Self-Interest, Appeal to Urging an opponent to accept or reject a particular position by appealing solely to his or her personal circumstances or self-interest, when a more important issue is at stake. (p. 110)

Special Pleading Applying principles, rules, or criteria to another person while failing or refusing to apply them to oneself or to a situation that is of personal interest, without providing sufficient evidence to support such an exception. (p. 171)

Straw Man, Attacking a *See* Attacking a Straw Man

Tradition, Appeal to Attempting to persuade others of a point of view by appealing to their feelings of reverence or respect for a tradition instead of to evidence, especially when a more important principle or issue is at stake. (p. 108)

Trivial Objections Attacking an opponent's position by focusing critical attention on a minor point in the argument. (p. 206)

Two-Wrongs Fallacy Rejecting a criticism of one's argument or actions by accusing one's critic or others of thinking or acting in a similar way. (p. 201)

Undistributed Middle Term *See* Middle Term, Undistributed

Unrepresentative Data Drawing a conclusion based on data from an unrepresentative or biased sample. (p. 163)

Using the Wrong Reasons *See* Wrong Reasons, Using the

Vague Expression, Misuse of a Attempting to establish a position by means of a vague expression or drawing an unjustified conclusion as a result of assigning a precise meaning to another's word or phrase that is imprecise in its meaning or range of application. (p. 131)

Wishful Thinking Assuming that because one wants something to be true, it is or will be true. Conversely, assuming that because one does not want something to be true, then it is not or will not be true. (p. 146)

Wrong Conclusion, Drawing the Drawing a conclusion other than the one supported by the evidence presented in the argument. (p. 97)

Wrong Reasons, Using the Attempting to support a claim with reasons other than the reasons appropriate to the claim. (p. 99)

ANSWERS TO SELECTED ASSIGNMENTS

CHAPTER V: FALLACIES THAT VIOLATE THE STRUCTURAL CRITERION

A. BEGGING-THE-QUESTION FALLACIES (p. 71)

2. **Question-begging definition.** The reason Sean does not let any evidence count against his claim is that he *defines* a criminal as someone who cannot be rehabilitated. A premise that provides a questionable definition that makes the conclusion true by definition is no different from the conclusion. It is a violation of the structural criterion of a good argument to use a premise that is the same as the conclusion that it allegedly supports.
4. **Arguing in a circle.** Dorothy claims that the Bible is the inspired word of God, and the reason she offers for her claim is that the Bible *says* that it is the inspired word of God. Using a premise that is the same claim as the conclusion is a violation of the structural criterion of a good argument.
5. **Complex question.** Senator Fisher is actually being asked two questions: (1) whether he will vote for the proposed cut and (2) whether the budget cut will weaken the U.S. military posture around the world. It is obvious from the way the question is asked that the questioner has already implicitly assumed the truth of a positive answer to the second question. This complex question violates the structural criterion of a good argument because it inappropriately assumes that the same answer can be given to both questions and implicitly assumes the truth of an important claim still at issue, that is, whether the bill, if passed, will weaken our military posture.
8. **Question-begging language.** By referring to the unseen house as “tacky,” the real estate broker uses question-begging language to bring Elijah to the

conclusion that he does not want to see any more houses. Since the “tacky” premise implicitly assumes the truth of the conclusion—namely, that Elijah does *not* want to see the “tacky” house—the argument violates the structural criterion of a good argument.

B. FALLACIES OF INCONSISTENCY (p. 76)

1. **Incompatible premises.** This argument uses as one of its premises a claim about the truth of skepticism and then in a second premise sets forth the definition of skepticism that *no* claim can be known to be true. To claim that skepticism is true contradicts the very position of skepticism that nothing can be known to be true. To set forth incompatible premises creates a situation in which no conclusion can be drawn, even though the arguer has done so by concluding that the search for truth be given up. The argument thus violates the structural criterion of a good argument, which requires that an argument’s premises must be compatible with one another.
2. **Contradiction between premise and conclusion.** In the premises of this argument, the arguer defends the view of individual moral relativism, the view that the only determiner of what is morally right or wrong is the individual himself or herself. The arguer then declares an individual determination that smoking marijuana is not morally wrong. But then the arguer *concludes* that his or her opponent, who has determined that smoking marijuana *is* morally wrong, has an incorrect judgment about it. This conclusion contradicts the premise asserting the moral relativist position that an individual (including one’s opponent) cannot be wrong when making a moral judgment. This argument violates the structural criterion of a good argument, which requires that an argument’s conclusion cannot contradict one of its premises.

C. FALLACIES OF DEDUCTIVE INFERENCE (p. 87)

4. **False conversion.** From the claim that those who obey the law will not get in trouble with the police, the arguer infers that those who do not get in trouble with the police are those who obey the law. Even if the first claim may be true, there is no reason to believe that the converted statement is true. Those who do not get in trouble with the police are not necessarily those who obey the law; they may simply not be caught in their breaking of the law. This argument fails to satisfy the structural criterion of a good argument because it violates a well-established rule of deductive logic that the subject and predicate terms in an A statement may not be exchanged without altering the statement’s truth value.
6. **Undistributed middle term.** The first and second premises of this argument are I statements. *Most* is translated as *some* because it is *less than all*. In an I statement, neither term is distributed, which means that the middle term, *non-violent acts*, is undistributed. An argument with an undistributed middle term fails to satisfy the structural criterion of a good argument because it violates a well-established rule of deductive logic.

7. **Denying the antecedent.** Sarah argues by means of a conditional argument that if Sherry's mother saw Sherry go into an X-rated movie this weekend, Sherry would be very embarrassed. Sarah then denies the antecedent by claiming that Sherry's mother will not see her go into the movie because her mother is out of town for the weekend. She then concludes that Sherry will therefore not be embarrassed. Sarah thus fails to consider things other than Sherry's mother seeing her that may cause her some embarrassment. Such a move fails to satisfy the structural criterion of a good argument because it violates a rule governing a well-formed conditional argument that says that one cannot deny the antecedent and then conclude the denial of the consequent.
9. **Affirming the consequent.** According to Esther's testimony, if she failed the course, she would drop out of school. By claiming that she has dropped out of school, the arguer has affirmed the consequent. The arguer then concludes the truth of the antecedent, that Esther failed Philosophy 101. There are a number of reasons that may be sufficient for Esther to drop out of school, but the arguer does not consider them. The argument thus fails to satisfy the structural criterion of a good argument because it violates the rule governing a well-formed conditional argument that says that one cannot affirm the consequent and then conclude the truth of the antecedent.
10. **Illicit distribution of an end term.** The subject term of the conclusion, *readers of this book*, is the subject of an A statement and is thus a distributed end term; but that same term is not distributed when it appears in the second premise, where it is in the predicate position of an A statement and thus *not* distributed. This argument fails to satisfy the structural criterion of a good argument because it violates the rule governing a valid syllogism that disallows the drawing of a conclusion with a distributed end term that is not distributed in one of the premises.

CHAPTER VI: FALLACIES THAT VIOLATE THE RELEVANCE CRITERION

A. FALLACIES OF IRRELEVANT PREMISE (p. 101)

1. **Using the wrong reasons.** None of the reasons given in the argument support the conclusion that Ms. Cox should be hired for the teaching position. She may have other relevant qualifications, but those are not mentioned. The argument violates the relevance criterion because the conclusion of a good argument must be supported by the *right* reasons, that is, reasons that have some bearing on the truth of the conclusion.
2. **Genetic fallacy.** The arguer has assumed that a white dress still means that the bride is a virgin and then has drawn the conclusion that Debra, who is not a virgin, should not wear white at her wedding. Since a white dress is no longer a sign of the sexual experience of a bride, the arguer's claim becomes irrelevant to the question of whether she should wear white. The argument violates the relevance criterion because it falsely assumes that the meaning or quality of a thing in the past is relevant to the thing in the present.

4. **Rationalization.** There is good reason to believe that the arguer is rationalizing. Although some very fine articles may appear in *Playboy* from time to time, that is probably not the *real* reason the arguer subscribes to it. The argument violates the relevance criterion because if fake rather than the real reasons for an action or belief are given in support of a claim, they cannot be relevant to the truth or merit of that claim.
5. **Drawing the wrong conclusion.** The conclusion that a person with a Ph.D. should not be hired does not follow from the premises given. The conclusion that should have been drawn from the premises is that it is not possible to determine the quality of a person's teaching on the basis of whether that person has a Ph.D. The argument thus violates the relevance criterion because the premises of a good argument must support or be relevant to the truth or merit of the claim at issue.

B. FALLACIES OF IRRELEVANT APPEAL (p. 115)

1. **Appeal to tradition.** That fact that the speaker and his or her family has always, or traditionally, voted for and considered themselves Democrats should play no role when the evidence in a particular case suggests that there are good reasons to vote for a Republican. An appeal to tradition when the more important issue of citizen responsibility is at stake violates the relevance criterion of a good argument.
2. **Appeal to force or threat.** Kim is being threatened by her mate. He says to her that if she intends to keep her own name when they marry, then he would not marry her. He is using a threat rather than good reasons to persuade her to take his name. An argument that uses a threat in the place of evidence violates the relevance criterion of a good argument.
3. **Appeal to self-interest.** The appeal made in this argument is directed toward the personal interests of a fellow Catholic—that is, whether or not the proposed legislation will financially assist struggling Catholic schools. No evidence is offered for the larger and more important parochial school issue. An argument that appeals to the personal interests of another when a more important issue is at stake violates the relevance criterion of a good argument.
4. **Manipulation of emotions.** The broker is trying to create a feeling of shame in the potential customer for accepting the enticements but not buying the product. But such enticements were offered with “no strings attached.” There is therefore no reason for the customer to feel shame. The attempt to persuade others by exploiting their emotions rather than using evidence is a violation of the relevance criterion.
5. **Irrelevant authority.** Dr. Chamberlain would perhaps be a relevant authority if she were testifying about another one of her clients. However, in this case, since she is a friend of the family of the accused, she is likely to be biased in her testimony about a member of that family. An authority who is likely to be biased cannot be a relevant authority. The use of her testimony in a defense argument would violate the relevance criterion of a good argument.
7. **Appeal to common opinion.** The fact that most women take their husbands' name when they marry is not relevant to whether or not it is a good practice.

The argument violates the relevance criterion because what large numbers of people or even the majority of people do is not relevant to whether that thing is worthy of doing.

CHAPTER VII: FALLACIES THAT VIOLATE THE ACCEPTABILITY CRITERION

A. FALLACIES OF LINGUISTIC CONFUSION (p. 135)

2. **Equivocation.** The meaning of the word *feel* shifts in mid-argument. The first use has to do with a physical sensation, while the second use refers to a mental perception. Since the key word in the premises does not maintain a uniform meaning throughout the argument, the conclusion does not follow. A linguistically confusing premise violates the acceptability criterion of a good argument.
4. **Distinction without a difference.** The speaker is trying to make a distinction between lying and stretching the truth and wants the hearer to conclude the less embarrassing latter interpretation. However, there is no distinction in substance between the two. Only the words are different. Hence, if the hearer thinks that lying is wrong, he or she should conclude that stretching the truth is wrong. An argument that uses a deliberately distorted premise cannot be a good one, for a confusing premise violates the acceptability criterion of a good argument.
5. **Illicit contrast.** From the claim that Robin feels good today, Jerry has made an unwarranted inference that Robin had not been feeling well before. Jerry has improperly placed an emphasis on Robin's last word and has then illicitly drawn an unstated contrasting claim. An improper emphasis placed on a speaker's claim turns it into a confusing and therefore unacceptable premise, the use of which is a violation of the acceptability criterion of a good argument.
8. **Argument by innuendo.** Annie does not assert that Lorraine is not helping with the charity show, but by her carefully worded response she *suggests* that claim. An argument that bases its conclusion on a premise that is indirectly suggested by innuendo is using a confusing and therefore unacceptable premise, which is a violation of the acceptability criterion of a good argument.
10. **Misleading accent.** The headline uses the words *doctors* and *patients* in a way that would cause the reader to draw the unwarranted conclusion that there may be a shortage of medical personnel serving the human residents in the county. A premise that is rendered confusing by virtue of its being improperly accented is a violation of the acceptability criterion of a good argument.
13. **Misuse of a vague expression.** The arguer misuses the vague word *liberal* by arbitrarily assuming that if Ron Diss is a liberal, he would be critical of the military. But one could not draw such a specific inference from the vague term *liberal*. An inference or conclusion that arbitrarily assigns a precise meaning to a vague word in a premise is using a hopelessly confusing premise, which violates the acceptability criterion of a good argument.
14. **Ambiguity.** Since it is unclear which of two meanings Jolie intended by the term *couldn't*, no conclusion can be drawn. The term could mean "is unable

because of other commitments on his time” or it could mean “is unable because he does not know how to do it.” Sela appears to have arbitrarily chosen one of those meanings, but she probably has no basis for doing so. The use of an ambiguous premise in an argument is a violation of the acceptability criterion of a good argument.

B. UNWARRANTED ASSUMPTION FALLACIES (p. 154)

1. **Faulty analogy.** This arguer compares coffee and alcohol and finds superficial similarities but ignores serious differences when drawing a conclusion. The argument violates the acceptability criterion because it implicitly uses as a premise the unwarranted assumption that things that are alike in one respect are necessarily alike in another significant respect.
2. **Misuse of a principle.** This arguer attempts to disprove or reject the principle that deception is wrong by citing unusual exceptions to the rule. The argument violates the acceptability criterion of a good argument because it implicitly employs as a premise the unwarranted assumption that a principle has no exceptions.
4. **Fallacy of composition.** The arguer falsely assumes that if every event or incident in the novel sounds plausible, the whole novel will sound plausible. The argument violates the acceptability criterion of a good argument because it implicitly uses as a premise the unwarranted assumption that what is true of the parts will be true of the whole.
5. **Fallacy of the continuum.** The arguer falsely assumes that it is arbitrary and thus inappropriate to make distinctions or cutoff points on a continuum between humans and other animal species and draws a conclusion based on that assumption. The argument violates the acceptability criterion of a good argument because it implicitly uses as a premise the unwarranted assumption that small differences along a line between extremes are insignificant.
6. **Fallacy of division.** This arguer falsely assumes that if the University of Virginia is one of the best universities, then one of its parts, the philosophy department, will be among the best. The argument violates the acceptability criterion of a good argument because it implicitly uses as a premise the unwarranted assumption that what is true of the whole is true of each of its parts.
7. **False alternatives.** This arguer falsely assumes that only two options are available concerning the future of the football program and that one of them must be chosen. The argument violates the acceptability criterion of a good argument because it implicitly uses as a premise an unwarranted assumption that limits too severely the number of options and assumes that one of them must be the right one.
8. **Is-ought fallacy.** Gene falsely assumes that since the typical manner in which people deal with sex *is not* through rational reflection, that is the way it *ought* to be. The argument violates the acceptability criterion of a good argument because it implicitly uses as a premise the unwarranted assumption that the way things are is the way they ought to be.
9. **Wishful thinking.** The arguer falsely assumes that in the absence of proof for the existence of God, one can simply make God a reality by *accepting* his

reality. Believing or wanting it to be true that God exists is not sufficient to produce that reality. The argument violates the acceptability criterion of a good argument because it implicitly uses as a premise the unwarranted assumption that what one wants to be true, is or will be true.

10. **Fallacy of the mean.** The judge falsely assumes that the truth is to be found somewhere in the middle between contradictory testimonies. He or she does not even consider other possibilities, such as the possibility that one of the witnesses is telling the truth and the other is not. This argument violates the acceptability criterion of a good argument because it implicitly uses as a premise the unwarranted assumption that the moderate position between extremes is the best or correct one, simply because it is the middle position.

CHAPTER VIII: FALLACIES THAT VIOLATE THE SUFFICIENCY CRITERION

A. FALLACIES OF MISSING EVIDENCE (p. 175)

1. **Special pleading.** The student is asking to be an exception to the professor's rule but gives no argument for it other than mentioning considerations that would equally apply to all other students. Since sufficient evidence on behalf of the claim for exceptional treatment is missing, the argument fails the sufficiency criterion.
2. **Insufficient sample.** One experience of eating bad or not-so-good food in one cafeteria would not be sufficient to infer anything about the quality of food in all institutional cafeterias. Since one such experience would not constitute sufficient evidence for the general claim, the argument thus fails to satisfy the sufficiency requirement, which calls for evidence of the right kind, weight, and number.
5. **Omission of key evidence.** The key pieces of evidence in the decision to buy a time-share are the initial price of the time-share and the amount of the annual maintenance fee, but this evidence is absent from the argument. Since the most important or key evidence is missing from the argument, the argument violates the sufficiency criterion of a good argument.
6. **Contrary-to-fact hypothesis.** There is no way of knowing whether having a college degree would have precluded one's being jobless at the present time. Since evidence relevant to a past event that did not occur is unavailable or impossible to obtain, the argument violates the sufficiency criterion.
8. **Arguing from ignorance.** Nothing can be inferred from no evidence at all. The fact that gays have not expressed concern or complained recently is not evidence that they are satisfied with the status quo. An argument that draws a conclusion based on the absence of evidence is a violation of the sufficiency criterion of a good argument.
13. **Unrepresentative data.** Even if the sample is a representative sample of New York City residents, it is not representative of all Americans. People who live in an urban area the size of New York are not likely to even have the opportunity to spend their leisure time hunting. Unrepresentative evidence does not provide

sufficient evidence to draw a conclusion and is thus a violation of the sufficiency criterion of a good argument.

14. **Fallacy of popular wisdom.** Since there are many ways to discipline children short of spanking them, the use of the spanking proverb appeals to questionable wisdom rather than to evidence. An argument that appeals to the nonevidence of folk wisdom rather than actual evidence is a violation of the sufficiency requirement of a good argument.

B. CAUSAL FALLACIES (p. 188)

1. **Causal oversimplification.** This argument oversimplifies the factors that cause colds. One cannot get a cold simply from not wearing a hat in cold weather, unless the cold germs are already present. Since the argument oversimplifies the causal antecedents of an event, the sufficiency requirement is not met.
2. **Post hoc fallacy.** The arguer here has inappropriately determined that there is a causal relationship between the event of Senator Lane's meeting with the president and the event of the senator's coming out in favor of the budget bill merely because of the temporal priority of the first event. Since temporal priority is not a sufficient reason for drawing any conclusion about a causal relation between events, the argument fails the sufficiency requirement of a good argument and the conclusion that the president applied pressure on the senator does not follow.
3. **Confusion of a necessary with a sufficient condition.** In this argument, controlling one's temper is stated as a necessary condition of making new friends—not a sufficient condition. There are no doubt a number of other conditions that might be necessary for making new friends, in addition to the not-losing-one's-temper condition. Since the argument confuses a necessary condition with a sufficient condition, it fails to provide sufficient evidence for the conclusion. Therefore, the argument violates the sufficiency criterion of a good argument, and the implicit conclusion that the adviser's plan didn't work does not follow.
4. **Domino fallacy.** This argument fails to provide evidence that shows how each of the events described is causally related to the next in the series. For the conclusion to follow, this evidence must be provided. The argument thus fails the sufficiency criterion of a good argument, and the "freaked out" conclusion does not follow.
5. **Gambler's fallacy.** The lack of luck in the past three hunting seasons is not causally related to the outcome of the next season. Past experience with chance events will not affect future chance events in any way. Since the claim about this season's outcome is based on a faulty causal analysis, the argument violates the sufficiency criterion of a good argument, and the conclusion that the deer hunt will be successful this year does not follow.
6. **Neglect of a common cause.** Rather than assuming that a large vocabulary ensures business success or even that business success leads to a larger vocabulary, it is more likely to be the case that some other common factor leads both to business success and a large vocabulary. Since the argument fails to recognize the probable causal factor in this context that is common to both events, it

violates the sufficiency requirement of a good argument, and the argument's conclusion does not follow.

7. **Confusion of cause and effect.** The arguer has confused the cause with the effect in this argument. It is more likely the case that their irritability has caused the fewer number of tips for Yoko and Liam rather than that the fewer number of tips has caused their irritability. Since the argument confuses the cause with the effect of an event, it violates the sufficiency criterion of a good argument, and the conclusion should not be embraced.

CHAPTER IX: FALLACIES THAT VIOLATE THE REBUTTAL CRITERION

A. FALLACIES OF COUNTEREVIDENCE (p. 197)

1. **Denying the counterevidence.** This argument doesn't even make an effort to minimize or explain away the evidence in the university report on pornography. It simply denies the evidence altogether. An argument that refuses even to consider and thus fails to rebut counterevidence to a position violates the rebuttal criterion of a good argument.
2. **Ignoring the counterevidence.** This arguer ignores the factor of the "sheer thrill of it all" in assessing the worthwhileness of the climb. Even though the *arguer* may not give the thrill factor much weight, the argument makes a judgment for *all* potential climbers and therefore must be addressed. An argument that ignores and thus fails to rebut important evidence against the position defended violates the rebuttal criterion of a good argument, and the conclusion of the worthlessness of the climb does not follow.

B. *Ad Hominem* Fallacies (p. 203)

1. **Two-wrongs fallacy.** In this short exchange Mark points out that Tonya's crying is doing something that is similar or at least has the same effect as Mark's yelling, but he does not address her proposal. Because of Mark's "you do it, too," thinking, he feels justified in ignoring Tonya's proposal and thus violates the rebuttal criterion of a good argument.
2. **Poisoning the well.** The parishioner "poisons the well" of the priest and refuses to listen to his advice about marriage, but there is no reason why a priest might not have some very good ideas about how to salvage a marriage, even though he may never have been married himself. The parishioner violates the rebuttal criterion of a good argument because he or she does not attempt to assess the merit of the priest's advice.
5. **Abusive *ad hominem*.** Rather than respond to the charge that he lied about his legislative attendance record, Mr. Ritchie abusively attacks Mr. Parker about his earlier stay at a mental hospital. By refusing to address the substantive issue, Mr. Ritchie has violated the rebuttal criterion of a good argument.

C. FALLACIES OF DIVERSION (p. 211)

1. **Red herring.** The professor ignores the student's argument about *student* involvement in governance and tries to shift attention to *faculty* involvement in governance. The professor violates the rebuttal principle by shifting the discussion to a related matter rather than addressing the question at issue.
2. **Resort to humor or ridicule.** Rather than answer Susan's concern, Congressman Creed uses humor to avoid addressing a politically explosive issue. It is a violation of the rebuttal principle to use humor in the place of a serious response to the merit of Susan's serious concern.
3. **Trivial objections.** Professor Reid attacks a very minor point in Professor Lang's proposal. Even if Professor Reid's claim were true, it would do no damage to Professor Lang's position. Professor Reid fails to satisfy the rebuttal criterion of a good argument because he does not address the strongest points in Professor Lang's argument.
6. **Attacking a straw man.** The mother has distorted or misrepresented the argument of her daughter. She therefore fails to address the substance of the real argument presented, which is a violation of the rebuttal criterion of a good argument.

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