

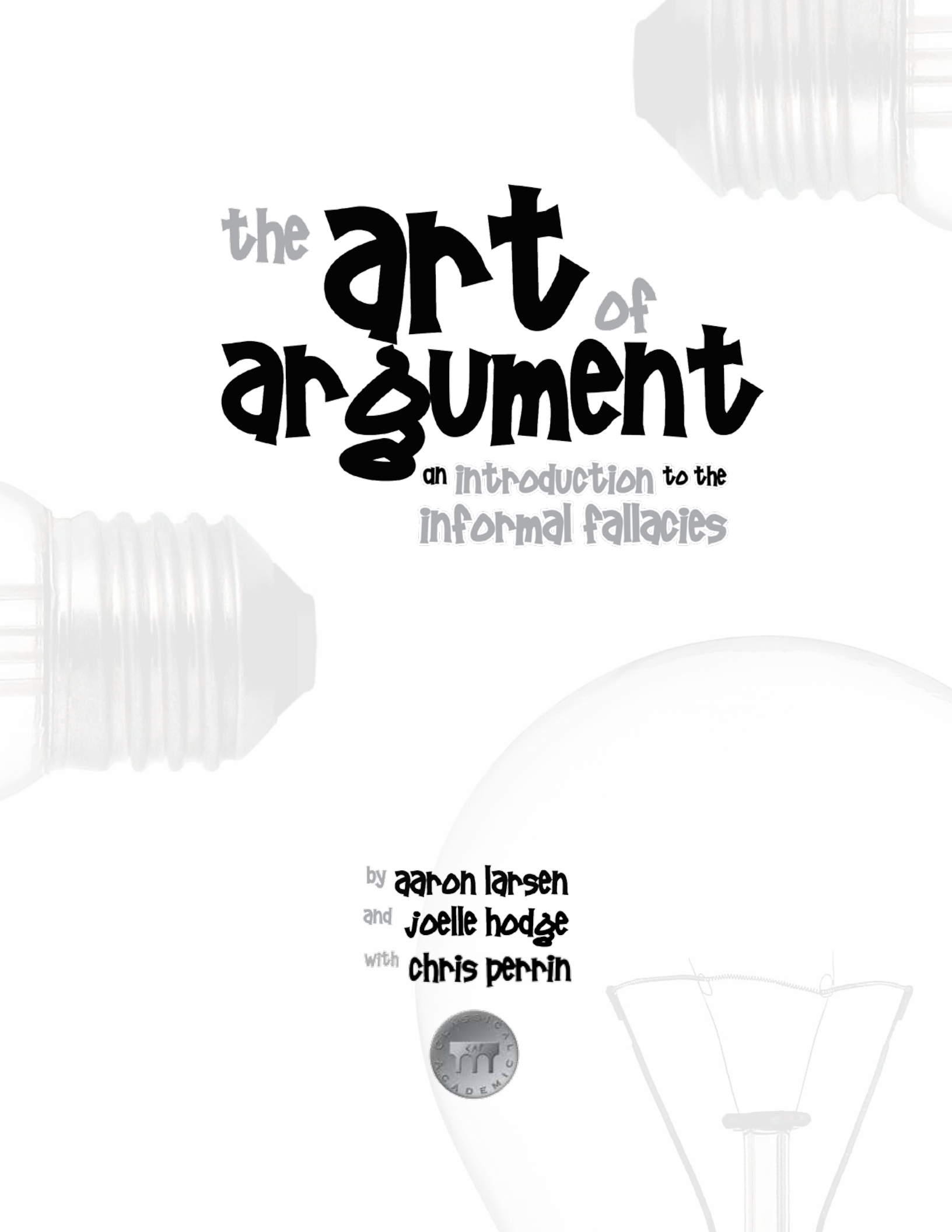
# the art of argument

an introduction to the  
informal fallacies

relevance  
presumption  
clarity



by aaron larsen  
and joelle hodge  
with chris perrin



the **art** of  
**argument**  
an introduction to the  
informal fallacies

by aaron larsen  
and joelle hodge  
with chris perrin





### ***The Art of Argument***

© Classical Academic Press, 2010  
Version 8.0

**ISBN: 978-1-60051-018-2**

All rights reserved. This publication may not be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior written permission of Classical Academic Press.

All advertisements, logos, company names, and slogans were created for this text and are purely fictional. Any resemblance to real companies, corporations, advertisements, logos, or slogans, past or present, is unintentional and purely coincidental.

Socrates, Tiffany, and Nate illustrations by **Ryan Toews**

“Dialogue on Appeals to Emotion” by **Andrew Davis**

“Love Is a Fallacy” by **Max Shulman**

Cover and advertisements by **Rob Baddorf**

**Classical Academic Press**

2151 Market Street  
Camp Hill, PA 17011

*www.ClassicalAcademicPress.com*

Let's Argue! .....	5
--------------------	---

## **What Is Logic?** 7

Fight Fair! How to Make an Argument Without Starting an Argument ...	7
Critical Thinking as a Way of Life .....	10
Formal vs. Informal Logic .....	14
Dialogue on Logic . . . and Propaganda .....	19

## **UNIT 1: Relevance** 24

Definitions Summary .....	24
Finding the Main Issue . . . and Asking the Right Questions .....	26
Dialogue: Winning an Argument . . . Sort of, While Losing a Friend .....	27

### **CHAPTER 1: *Ad Fontem* Arguments** 31

Fallacy 1: <i>Ad Hominem</i> Abusive .....	32
Fallacy Discussion on <i>Ad Hominem</i> Abusive .....	35
Fallacy 2: <i>Ad Hominem</i> Circumstantial .....	37
Fallacy Discussion on <i>Ad Hominem</i> Circumstantial .....	40
Fallacy 3: <i>Tu Quoque</i> .....	42
Fallacy Discussion on <i>Tu Quoque</i> .....	45
Fallacy 4: Genetic Fallacy .....	47
Chapter 1 Review .....	51

### **CHAPTER 2: Appeals to Emotion** 52

Dialogue on Appeals to Emotion .....	53
Fallacy 5: Appeal to Fear ( <i>Argumentum Ad Baculum</i> ) .....	58
Fallacy Discussion on Appeal to Fear .....	62
Fallacy 6: Appeal to Pity ( <i>Argumentum Ad Misericordiam</i> ) .....	63
Fallacy Discussion on Appeal to Pity .....	67
Fallacy 7: Mob Appeal ( <i>Argumentum Ad Populum</i> ) .....	69
Fallacy 8: Snob Appeal .....	75
Cumulative Fallacy Worksheet .....	78
Fallacy 9: Appeal to Illegitimate Authority ( <i>Argumentum Ad Verecundiam</i> ) .....	80
Fallacy Discussion on Appeal to Illegitimate Authority .....	85
Fallacy 10: Chronological Snobbery .....	87
Chapter 2 Review .....	91
Cumulative Fallacy Worksheet .....	94

### **CHAPTER 3: Red Herrings** 96

Fallacy 11: Appeal to Ignorance .....	97
Fallacy Discussion on Appeal to Ignorance .....	100
Fallacy 12: Irrelevant Goals or Functions .....	102
Fallacy 13: Irrelevant Thesis .....	105
Fallacy Discussion on Irrelevant Goals or Functions and Irrelevant Thesis .....	108
Fallacy 14: Straw Man Fallacy .....	110
Chapter 3 Review .....	114
Cumulative Fallacy Worksheet .....	116

**UNIT 2: Presumption** 118

Definitions Summary ..... 118  
Fallacies of Presumption ..... 120

**CHAPTER 4: Fallacies of Presupposition** 121

Fallacy 15: Begging the Question (*Petitio Principii*) ..... 122  
    Fallacy Discussion on Begging the Question ..... 126  
Fallacy 16: Bifurcation (False Dilemma) ..... 128  
    Dialogue on Presumption ..... 132  
    Fallacy Discussion on Bifurcation ..... 136  
Fallacy 17: Fallacy of Moderation ..... 138  
Fallacy 18: Is-Ought Fallacy ..... 142  
    Fallacy Discussion on the Is-Ought Fallacy ..... 145  
Fallacy 19: Fallacy of Composition ..... 147  
Fallacy 20: Fallacy of Division ..... 150  
    Fallacy Discussion on Composition and Division Fallacies ..... 153  
Chapter 4 Review ..... 155  
Cumulative Fallacy Worksheet ..... 158

**CHAPTER 5: Fallacies of Induction** 160

Fallacy 21: Sweeping Generalization (Accident) ..... 163  
Fallacy 22: Hasty Generalization (Converse Accident) ..... 167  
Fallacy 23: False Analogy ..... 170  
    Fallacy Discussion on False Analogy ..... 173  
Fallacy 24: False Cause ..... 175  
Fallacy 25: Fake Precision ..... 180  
Chapter 5 Review ..... 184  
Cumulative Fallacy Worksheet ..... 186

**UNIT 3: Clarity** 188

**CHAPTER 6: Fallacies of Clarity** 189

Dialogue on Fallacies of Clarity ..... 191  
Fallacy 26: Equivocation ..... 195  
    Fallacy Discussion on Equivocation ..... 199  
Fallacy 27: Accent ..... 201  
Fallacy 28: Distinction Without a Difference ..... 204  
    Fallacy Discussion on Distinction Without a Difference ..... 207  
Chapter 6 Review ..... 209  
Cumulative Fallacy Worksheet ..... 211

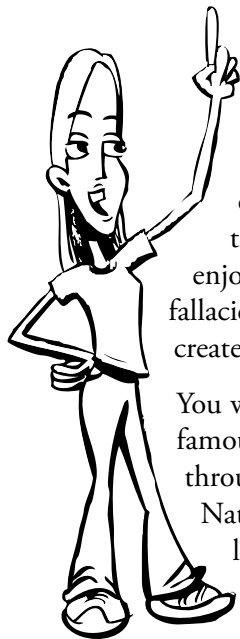
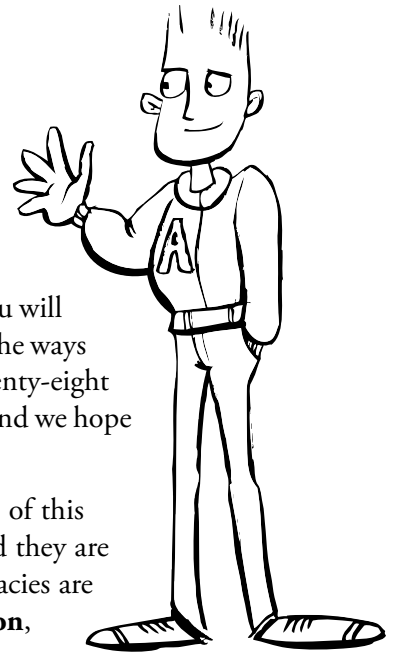
---

Appendix A: “Bill and Ted’s Excellent Election” ..... 213  
Appendix B: “Love Is a Fallacy” ..... 216  
Glossary ..... 224  
Bibliography ..... 230

# Let's Argue!

**H**ave you ever heard an argument from a friend that didn't seem right? Perhaps you knew that something was wrong with an argument but could not figure out just what the problem was. Well, after studying this book, you will know just what is wrong with bad arguments, and you will even learn the names for the ways that arguments can be bad. You will learn the most important "logical fallacies"—twenty-eight of them to be exact. A logical fallacy<sup>1</sup> is an occurrence of bad or incorrect reasoning, and we hope you will learn to sniff out bad reasoning like a hound dog.

All twenty-eight of the fallacies are listed with their definitions on the inside covers of this book. We encourage you to review them often until you have them memorized and they are part of your permanent mental framework. You will note that the twenty-eight fallacies are divided into three basic categories: **fallacies of irrelevance**, **fallacies of presumption**, and **fallacies of clarity**. Simply put, this means that when people **reason** badly they may err in one of three basic directions: they can make points that just don't relate to the issue (irrelevancy); they can make assumptions that are not justified or necessary (presumption); or they can use language that confuses and muddies the argument (clarity). As you learn to evaluate arguments, you will soon be asking yourself questions such as, "Is his point **relevant**? What does his argument **presume**? Is she being **clear**?"



While you can review all twenty-eight of the fallacies at any time (even now!) we will nonetheless proceed chapter by chapter and cover each of these fallacies in turn, providing several examples of each and giving you opportunities to sniff out fallacies in the form of written arguments (bad arguments) and in sixty-five magazine advertisements that each contain one of the twenty-eight fallacies. Yes, advertising is full of fallacies! We have created each of these advertisements ourselves, so you must know now that the products and services they advertise are imaginary. We think you will enjoy them and they will provide you with some good practice in detecting fallacies that occur in our everyday lives. Occasionally we will even ask you to create some of your own fallacies.

You will also note that this text contains a series of ongoing dialogues with the famous Greek philosopher Socrates (400 BC), who is somehow able to travel through time and talk with a couple of college students named Tiffany and Nathan. As Socrates talks with Tiffany and Nathan he will teach them about the logical fallacies (what else?) and you will have the benefit of listening in.

You will see that the book is divided into three units, six chapters, and twenty-eight fallacies. Unit 1 is about **relevance** and contains fourteen fallacies. Unit 2 is about **presumption** and contains eleven fallacies. Unit 3 is about **clarity** and contains three fallacies. At the beginning of each unit there is a page of definitions and fallacies that you will master during the unit. We recommend that you memorize these definitions early on and then deepen your understanding of them as you go. Regular practice and review will enable you to detect fallacies quickly and to reason well.

1. The word "fallacy" comes from the Latin word *fallacia*, which means "deceit," "trick," or "fraud." The Latin verb *fallo*, *fallere*, *fefelli*, *falsum* means "to deceive." From *fallacia* and *fallo* we also get our English words "fallacious" and "false." The Latin roots of "fallacy" remind us that a fallacy can be both a deception and a trick.

When you come across a word that is difficult, you will likely find it defined in the glossary at the end of the book. Many of the words that appear in **bold** in the text will also be defined in the glossary. There will also be some logical and technical terms in the glossary that you will not find in the text, but that will help you learn additional vocabulary related to the study of the informal fallacies. Studying the glossary will also serve as another way to review the fallacies and the essential content of the book.

For a fun way to review some of the fallacies, you will enjoy “Bill and Ted’s Excellent Election: A Theatrical Play Demonstrating the Common Fallacies.” You can simply read the play, but it also can be produced as a brief play that will be enjoyed by schools and homeschool co-ops. The play is included in Appendix A at the end of the book.

You will also enjoy Max Shulman’s story, “Love Is a Fallacy,” which shows how the logic you learn can be used against you—even in romantic matters. Shulman’s story is included in Appendix B.

Please note that this text will represent fallacies from many different sources. Fallacies are present on the political left and right (and in the middle) and in the arguments of people of all kinds of political, religious, and cultural viewpoints. No one “school of thought” is fallacy-free!

In the pages of *The Art of Argument*, I hope you enjoy your study of reasoning gone wrong as you learn how to make reasoning go right. Your friends and acquaintances should beware, for after you have mastered the logical fallacies, you won’t be so easily tricked.



Christopher A. Perrin, Ph.D.  
Publisher

# Fight Fair! How to Make an Argument Without Starting an Argument

As you may have guessed, this is a “how-to” book, but one of a rather special sort. Its goal is to introduce the reader to the art of arguing like a philosopher. Don’t get turned off by any ideas you have about how philosophers argue before a few terms are explained. First, here are some questions to answer:

What do you think of when you hear the word “logic”?

---



---



---

What comes to mind when you hear the word “argument”?

---



---



---

*Perhaps the principal  
objection to a quarrel  
is that it interrupts  
an argument.*

—G.K. Chesterton

What is meant by “argue”? The above subtitle (Fight Fair! . . .) is a deliberate play on two meanings of this word. In the most common, or “negative” sense, “having an argument” implies an emotional disagreement. This is not what is meant when we refer to how philosophers should argue. (Some of them have been known to slip-up, of course. As philosophers, however, they should know better.)

The Latin word *argūtus* means “clear, bright, distinct or penetrating.” The Latin noun *argūmentum* means “evidence or proof.” The Latin verb *arguō* means “to prove or reveal.” To the Latin mind, an argument was not necessarily an emotional disagreement, rather it was an attempt to reveal what was true on the basis of evidence and **reason**. In short, to argue is to provide rational reasons for or against an idea or action.



Philosophers are expected to argue in the “positive” sense. They try to convince, or persuade, others of their points of view by giving reasons to support them. From the early Greek philosophers who sought truth based on reason, to Peter’s New Testament exhortation to “be ready to give the reason for the hope that is in you” (1 Peter 3:15, author paraphrase) to the modern law courts where prosecutors seek to prove their cases “beyond a reasonable doubt,” there remains a tradition of respectful argumentation. Philosophers, as you shall see, are those who love wisdom and who enjoy respectfully arguing.

In fact, learning how to present your views carefully through the use of logical arguments in the positive sense is a very important skill to learn if you want to avoid arguments in the negative sense.

Obviously, there is far more to it than this. Learning how to deal with differences of opinion in a way that minimizes unnecessary conflict involves many skills, especially skills in reading, or understanding, other people. After all, the same verse in 1 Peter cautions the reader to frame his arguments with “gentleness and respect.”

If you wish to avoid emotional disagreements that are completely unnecessary, gentleness and respect are a good starting point. You must, however, also learn to follow the rules for arguing like a gentleman or a lady and a philosopher.

If you are sure your arguments are addressing the real issue in a relevant way (following the principle of **relevance**), others will be less likely to think you are trying to distract them from the main issue. They will not view your arguments as a personal affront to themselves (or others). However, if you violate the principle of relevance in your **debate** by introducing facts, issues, and concerns that distract from the main issue, others may note your efforts to dodge the issue and become frustrated with you.

If your arguments do not contain unnecessary assumptions (following the principle of **presumption**), it is likely that others will not think you are trying to trick them. On the other hand, if you make unjustified, unstated assumptions (such as assuming that only new ideas are better than old ideas, or old better than new) you may irritate others.

If your arguments contain clear language (following the principle of **clarity**), others will be less likely to misunderstand you. If you speak unclearly by using words in two different senses or by speaking with unjustified or pretended precision (especially with numbers or statistics), you will likely confuse others and hinder a respectful argument.

So, in your arguments with others, seek to stay relevant, presume nothing illegitimate, and speak clearly. That’s fighting fair and makes for enjoyable arguments with friend and foe.

**A. ANSWER THE FOLLOWING:**

1. How can people argue “positively”? How can people argue “negatively”?

---

---

---

---

---

2. How do people sometimes violate the principle of relevance when arguing?

---

---

---

---

---

3. How do people sometimes violate the principle of presumption when arguing?

---

---

---

---

---

4. How do people sometimes violate the principle of clarity when arguing?

---

---

---

---

---

## Critical Thinking as a Way of Life

By mastering the “art of argument,” you will learn not only to argue like a philosopher, but also to think clearly like a philosopher, as well. The use of the word “philosopher” in this book does not mean someone who majors in philosophy in college or has a PhD in the subject. It is meant to be defined in its original, oldest sense, coming from a combination of two Greek words, *philos*, meaning, “loving” and *sophia*, meaning “wisdom.” In its original sense, then, the word “philosopher” means “lover of wisdom.”

A philosopher (the greatest example of which may be Socrates) is someone who takes a passionate interest in discussing the most important things in life. This includes such “deep” issues as what is “really real” (**metaphysics**) and how we know what we know (**epistemology**). On the other hand, it also includes an interest in thoughtfully evaluating others’ recommendations concerning everyday issues, such as what to believe, who to vote for, and whether or not to buy product “X.”

Evaluating the arguments of others is one of the most important and foundational skills that any person can have. This is, perhaps, more true today than it has ever been. The world bombards us with all sorts of recommendations about what to buy, what to believe, and what to do.

Politicians and advertisers often find it easy to manipulate people’s emotions, or to convince them by misleading or confusing them. After all, in this least philosophical of all periods of Western history, this has become an acceptable behavior. Just because something *is* a certain way, however, doesn’t mean it *ought* to be that way. (See the is-ought fallacy on page 142.) Just because others are doing the wrong thing doesn’t mean you should. (See the *tu quoque* fallacy on page 42.)

In addition to evaluating the arguments of others, you will sometimes find that you need to make your own recommendations to others about what to do, what to believe, and yes, perhaps even what to buy. The question is how are you going to go about it? Rather than resorting to trickery, you will probably be much more satisfied if you make your recommendations with integrity. In the field of logic, that means avoiding manipulation and deception. It means arguing like a gentleman or lady, one who “fights fair,” rather than arguing like a demagogue, one who resorts to sneaky and manipulative tricks to get the results he wants. In truth, arguing like a gentleman or lady is the first step toward learning to argue like a philosopher.

Not only is it the right thing to do, it also works. It doesn't always work as quickly as demagoguery, but in the end it will be much more effective; those you convince will be convinced for the right (logical) reasons.

### **It Does Not Follow: A Word About *Non Sequitur***

From one perspective, all the fallacies you will study can be grouped under the general category of faulty conclusions that “do not follow” from their premises. The Latin phrase *non sequitur* means “it does not follow.” Therefore, any argument that presents a conclusion that does not follow from its premises can be called a *non sequitur*.

For example, if we argue that since Senator Johnson is under investigation for tax evasion we cannot accept his proposal for building a new bridge, we have committed a *non sequitur*. From the fact that Senator Johnson is under investigation for tax evasion it does not follow that his proposal for bridge building is unacceptable. This kind of fallacy is called an *argumentum ad hominem* (“argument to the man”) fallacy, which is a fallacy that seeks to abuse the person making the argument instead of addressing the real issue.

Let's look at another example. If a used book seller were to say, “Never buy a new book over an old book—it is the old books that contain hard-won wisdom,” we could charge him with a *non sequitur*. It simply does not follow that just because a book is old it will contain wisdom. Nor does it follow that just because a book is new it will not contain wisdom. This fallacy, as you will learn later, is called “chronological snobbery”; it is committed when someone tries to discredit or approve of something merely by appealing to its age.

### **Does It Follow?**

When you are presented with an argument, it is helpful to ask yourself if the conclusion truly follows from the premises. If you sense you have a *non sequitur* before you, it is good to probe further. Why doesn't the conclusion follow? Is the **premise** relevant (relevance) to the issue or conclusion presented? Does the argument or premise assume or presume (presumption) something that is hidden but unacceptable? Is the premise clear (clarity)?

By violating the principles of relevance, presumption, or clarity, all the fallacies you study will in one way or another feature conclusions that do not follow from their premises or the evidence to which they appeal. They are all versions of a *non sequitur*. As you embark on your study of the informal fallacies, this will become increasingly clear.

### ***Argumentum ad* What?**

You will notice that many of the fallacies have Latin names. The first one you will learn is called the *argumentum ad hominem* (argument to the man), often called the *ad hominem* fallacy for short. In fact, most of the fallacies with Latin names will be abbreviated this way, with the word *argumentum* being assumed. For example, the *argumentum ad populum* (argument to the people) may simply be called the *ad populum* fallacy.

**A. DEFINE:**

Define the words below by referring to the lesson you have studied and by looking them up in a good dictionary. Record the etymology (history or linguistic origin) of as many words as you can. For example, the word “etymology” comes from two Greek words: *etumos* (“the real” or “the true”) and *logos* (“reason,” “word,” or “study”).

1. Philosopher:

---

---

---

2. *Philos*:

---

---

---

3. *Sophia*:

---

---

---

4. Metaphysics:

---

---

---

5. Epistemology:

---

---

---

5. Socrates:

---

---

---

**B. FURTHER RESEARCH:**

Write a short essay answering both of the following questions. Use available classroom resources, Internet sites, or library resources.

1. Why do you think the authors of this book consider that Socrates may be the greatest example of a philosopher?

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

2. Why do you think it will be valuable to study informal logic? Why do you think British writer G.K. Chesterton said, “Perhaps the principal objection to a quarrel is that it interrupts an argument”?

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

## Formal vs. Informal Logic

The first two lessons in this book were something of a pep talk. Now let's take some time to define logic and its two main subdivisions: **formal logic** and **informal logic**. **Logic can be defined as “the art and science of reasoning.”** While this is a course in informal logic, it is helpful to know the main characteristics of both formal and informal logic. After studying this course in informal logic, we encourage you to study our companion text, *The Discovery of Deduction*, which is on formal logic.

Formal logic is about pure reasoning in the abstract. It usually focuses on deductive reasoning; that is, it focuses on types of arguments in which the premises<sup>1</sup> imply a necessary conclusion. For example:

**Premise 1:** All birds have wings.  
**Premise 2:** A cardinal is a bird.  
**Conclusion:** Therefore, a cardinal has wings.

In this type of argument (often called a syllogism), the conclusion must be true (a cardinal has wings) as long as the premises are true. When the proper form is followed, we can have a valid argument that is actually nonsensical and untrue. For example:

**Premise 1:** All birds have horns.  
**Premise 2:** A poodle is bird.  
**Conclusion:** Therefore, a poodle has horns.

This argument (or syllogism) is **valid**, meaning that its form or structure is correct. If it were true that all birds have horns and that a poodle is a bird, then it must follow that a poodle has horns. However, in this argument, the premises happen to be false even though the form is correct. So, the argument is **valid in form**, but not **sound** because of the false premises.<sup>2</sup> If the premises were true, then the argument would be both valid and sound, like the first argument!

You can see that in formal logic, form is very important: that is why it is called *formal* logic.<sup>3</sup> In fact, in the study of formal logic, a student learns very quickly to replace ordinary words, such as “all birds have wings,” with symbols, such as “all B are W” (for “all birds are wing possessors”). If the *form* of an argument is what's important in formal logic, then the *content* of the argument (what we are arguing about) is more or

1. Premise are reasons or propositions given in an argument that supports or leads to a conclusion.

2. The word “sound” in logic means that an argument is free from defect or fallacy. It is possible for an argument to be valid (having correct form or structure) but still not be sound if the premises are false.

3. Note that *forma* is Latin for “form” or “shape.”

less interchangeable. When symbols such as “B” and “W” represent **categories** such as “birds” and “wings,” this kind of formal logic is called **categorical logic**. When the symbols are joined together to form statements or propositions, as in “all B are W,” we are entering the realm of **propositional logic**. When we use propositional logic, the symbols are joined together with other symbols that replace words such as “and,” “or,” “not,” or “implies.” These connecting symbols are called **logical operators**. We use “ $\wedge$ ” for “and” and “ $\vee$ ” for “or” and “ $\sim$ ” for “not.” For example, we can represent “Either a cardinal is a bird or it is not a bird” as “ $B \vee \sim B$ .”

Now you have had a brief introduction to formal logic, with its subcategories of categorical and propositional logic. This course, however, focuses on informal logic. Informal logic is not so concerned with form or structure. Rather, it is concerned with arguments made using everyday, ordinary language. It also tends to emphasize *inductive* rather than *deductive* reasoning. The Latin word *deducere*, from which the English word “deduce” is derived, means “to lead down or away.” Therefore, **deductive reasoning** is reasoning that starts with premises that “lead down” to a necessary conclusion. Deductive reasoning can be described as “whole-to-part” reasoning. The Latin word *inducere*, from which the English word “induce” is derived, means “to lead” or “bring in.” **Inductive reasoning**, therefore, can be described as “part-to-whole” reasoning. We begin with particular facts and try to prove a general conclusion. Inductive reasoning involves “bringing in” certain facts to an argument in an attempt to prove a more general point. For example, I may “bring in” the facts that every bird I have seen flies in order to prove that all birds fly. In other words, inductive reasoning often works toward generalizations that are reasonably accurate. However, because the form of inductive arguments does not lead to absolute certainty, these arguments are only more or less probable. For example, does my experience of seeing birds fly prove that all birds fly? No. In fact, we know that the ostrich is a bird that can run very fast but cannot fly.

While deductive arguments, therefore, are said to be either valid or invalid, inductive arguments are said to be either strong or weak. Deductive logic addresses things that are either “black” or “white,” while inductive arguments deal in “shades of gray.”

<i>Formal Logic</i>	<i>Informal Logic</i>
<ul style="list-style-type: none"> <li>• Deductive reasoning</li> <li>• Either valid or invalid</li> <li>• Certainty (given the premises)</li> </ul>	<ul style="list-style-type: none"> <li>• Inductive reasoning</li> <li>• Either strong or weak</li> <li>• Probability</li> </ul>

**A Word About Informal and Formal Fallacies**

As you well know, this book is about the informal fallacies, also called logical fallacies. The informal fallacies are weak, poor, and fallacious arguments that occur in common language. These fallacies are not fallacious because of matters of form or structure, but because they violate principles such as relevance, presumption, and clarity. You will be studying these principles and how they are violated throughout this book. There are such things as formal fallacies, too, and they occur when an argument violates established forms that syllogisms should take. You can study these formal fallacies in *The Discovery of Deduction* or similar texts.



The most fundamental difference between informal logic and formal logic is that informal logic deals almost entirely with ordinary-language arguments. In fact, one historian of logic described informal logic as “dialectical logic.”<sup>4</sup> He meant that it is the language of debate and of the interchange of ideas between people, as opposed to the logic of one man reasoning all by himself.<sup>5</sup>

One danger of overemphasizing formal logic at the expense of informal logic is that the study of logic can lose its “dialectic interplay,” its sense of a back-and-forth exchange between real people. Logic can be both an art and a science. That is, it can be treated in a way that focuses on the practical and artistic (logic as an art) or it can be treated in a way that is exact and academic (logic as a science). Both approaches are important; however, the first approach (logic as an art) has been neglected. That is why this book is called *The Art of Argument*; it is intended to remedy this past neglect. Its intent is to focus on things that can help and encourage you in “dialectical activities,” such as debates, mock trials, and discussions. This book focuses on everyday language arguments.

In fact, future courses of this logic series will have built-in sections designed to give you “how-to” instruction in debates and mock trials. First, though, you need to hone your critical-thinking skills by learning to critique the arguments of others. In doing this, informal logic is “where the rubber meets the road.” This book begins by studying a number of bad arguments commonly known as “fallacies.” By learning to detect bad arguments, you will learn how to avoid them yourself and how to make good arguments as well.

In the next section, you are going to eavesdrop on a conversation about some of the practical implications of good and bad reasoning. Use your imagination and picture a TV room at a typical college, where Socrates is about to engage in a rather interesting conversation.

---

4. C.L. Hamblin, *Fallacies* (London: Methuen, 1970), 9.

5. According to this outlook, many ways of approaching inductive logic could actually be classified as “formal logic.” (A good example of this could be an in-depth study of scientific reasoning, using John Stuart Mill’s canons for establishing causality, as is done in Irving M. Copi’s logic curriculum, *Introduction to Logic*.) That is because inductive arguments can also be analyzed in ways that focus only on the form or structure of the argument and in ways that don’t involve the back-and-forth, interpersonal dimension of debate between people.

**A. DEFINE:**

1. Logic:

---

---

2. Formal Logic:

---

---

3. Informal Logic:

---

---

4. Deductive Reasoning:

---

---

5. Inductive Reasoning:

---

---

**B. FURTHER RESEARCH:**

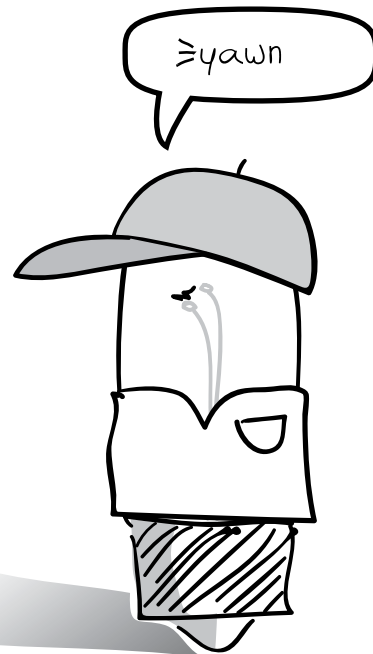
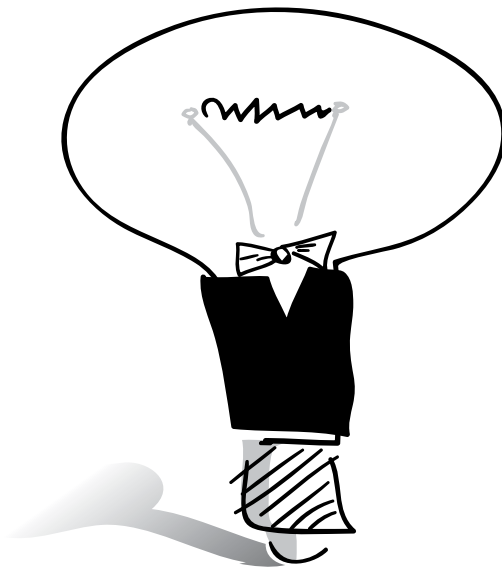
Write a short essay answering the following questions. Use available classroom resources, Internet sites, or library resources.

1. What are the main differences between deductive and inductive reasoning?

2. What do you think the benefits of studying formal logic might be?

3. What do you think the benefits of studying informal logic might be?

My good logical fellow, don't you think that you are a bit too informal? We know with absolute certainty that people who wear ball caps are children. Let's label them IM for "immature."



## Dialogue on Logic . . . and Propaganda

*Setting: Lobby in a college dormitory*

**Socrates:** Excuse me, would you mind my asking what you are doing?

**Tiffany:** I'm watching TV. Isn't that obvious?

**Socrates:** Not so obvious as you might think. Your eyes, and mind, appeared to be elsewhere for a moment.

**Tiffany:** Oh. Well, it was just a boring commercial. I was thinking about something else while it was on.

**Socrates:** Boring? On the contrary; I think that commercials make some of the most interesting television these days.

**Tiffany:** Really? Why would you say that?

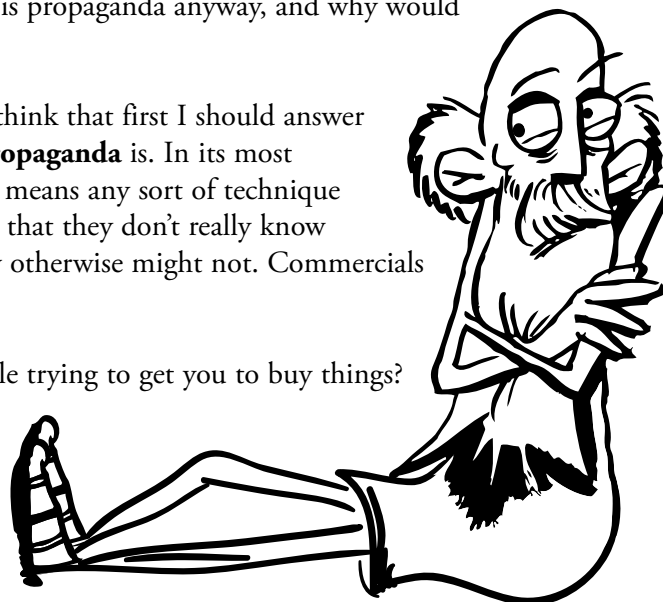
**Socrates:** Well, to begin with, they're often much more funny and clever than the silly sitcoms aired so often these days. But that's not my main reason. For the most part, I like them because they are so filled with propaganda.

**Tiffany:** Propaganda! Isn't that a bad thing? What is propaganda anyway, and why would you want to listen to it?

**Socrates:** Whoa, whoa! One question at a time. I think that first I should answer your second question, in which you asked what **propaganda** is. In its most basic meaning, the sense in which I am using it, it means any sort of technique that people use to get other people (usually people that they don't really know personally) to do or to believe something that they otherwise might not. Commercials often use propaganda to get people to buy things.

**Tiffany:** So why would you want to listen to people trying to get you to buy things? Do you like shopping?

**Socrates:** Not really. You can see from my outfit that I'm not exactly at the height of fashion.



**Tiffany:** Yeah, I was just about to ask you about that. Where do you do your shopping, at the Sears White Sale? Don't you get cold in that get-up?

**Socrates:** Actually, I was often made fun of in my day for absentmindedly forgetting my cloak. And, no, I did not shop at a white sale. I purchased this from the tailor back in my country.

**Tiffany:** What is your country? And what is your name, by the way?

**Socrates:** I am Socrates, and I am from ancient Athens.

**Tiffany:** Sure, and I am Cleopatra, Queen of Denial.

**Socrates:** Pleased to meet you. Mind if I call you Cleo for short?

**Tiffany:** No, no; my name's not Cleo. It's Tiffany.

**Socrates:** Then why did you say your name was Cleopatra?

**Tiffany:** Because you said your name was Socrates.

**Socrates:** My name *is* Socrates.

**Tiffany:** Look, I don't want to argue with you.

**Socrates:** But I would love to argue with you.

**Tiffany:** Why would anyone like to argue?

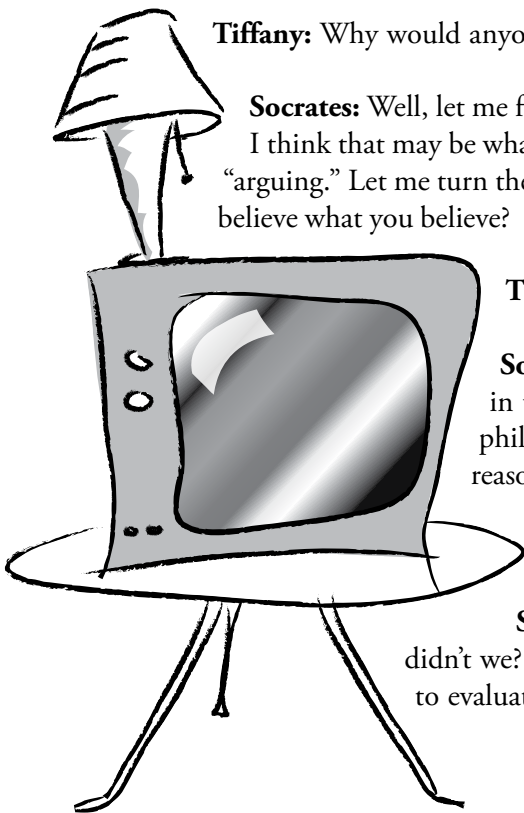
**Socrates:** Well, let me first explain. By "argue," I don't mean engage in petty squabbling. I think that may be what most people mean most of the time when they say the word "arguing." Let me turn the question to you. What would you do if someone asked you why you believe what you believe?

**Tiffany:** Well, I suppose that I would give them reasons.

**Socrates:** In that case, you would be making an argument, at least in the sense in which I mean it. I'm a philosopher and when we philosophers use the term "argue," we usually mean "to provide rational reasons for or against an idea or action."

**Tiffany:** So why would a philosopher like watching propaganda?

**Socrates:** Good question. We did get a bit off of the track there, didn't we? I like to watch propaganda because it provides a good opportunity to evaluate arguments. You see, whenever someone tries to get you to do



anything, they are trying to persuade. Usually, when someone is trying to persuade, they give reasons, and whenever they do, they are making an argument.

**Tiffany:** That's all that it takes to make an argument? You just have to give a reason for something?

**Socrates:** That's basically it. The reasons that you give are called the premises, and the thing for which you are giving the reasons is called the conclusion.

**Tiffany:** But . . . not all propaganda makes an argument. Take this one with the frogs and lizards that is trying to sell beer, for example. What kind of argument is it making?

**Socrates:** That is another good question. Here's an idea: Perhaps it is making an implied argument that goes something like this: "We make clever, funny commercials about frogs and lizards that entertain millions. You should buy our beer to show your appreciation for this public service."

**Tiffany:** That doesn't have anything at all to do with whether or not it is a good product.

**Socrates:** You are absolutely right once again. This brings to mind the first of the three great principles of critical thinking: relevance. Do the premises really "bear upon," or provide some support for, the conclusion? If not, the argument is just a distraction from the real issue.

**Tiffany:** Aren't you reading an awful lot into this commercial, though?

**Socrates:** Well, you're right. I was only being facetious. That commercial might be better explained as a form of "non-argumentative persuasion"—an attempt to convince you without making an open argument at all. That is something for which we need to be especially careful. After all, if someone wants to convince you to do something without giving you a single rational reason . . . Oh, but here is a perfect example of an irrelevant argument now. What reasons are they giving you to buy that soft drink?

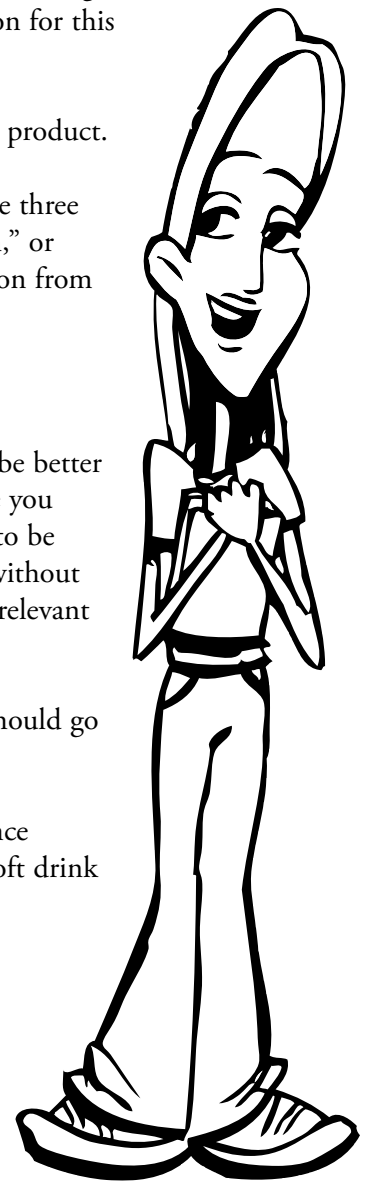
**Tiffany:** Well, they seem to be saying that since Grant Hill likes the soda, you should go and buy it as well.

**Socrates:** Exactly. That is called an argument from illegitimate authority, and since there is no good reason to accept the authority of Grant Hill on the subject of soft drink desirability, it commits a very important fallacy.

**Tiffany:** What, exactly, is a "fallacy"?

**Socrates:** A fallacy is a commonly recognized type of bad argument.

**Tiffany:** Commonly recognized by whom?



**Socrates:** Good point. Unfortunately, the study of logic isn't exactly at its highest ebb these days and these fallacies aren't as commonly recognized as they ought to be. What I really mean by "commonly recognized" is that it is commonly recognized by those who have studied philosophy or logic.

**Tiffany:** So what type of fallacy does that commercial make?

**Socrates:** It's called the appeal to illegitimate authority. It is one of many fallacies of relevance.

**Tiffany:** So that's why you like commercials. You like to analyze them.

**Socrates:** Absolutely. Every commercial contains an attempt at persuasion. In almost every case, it will be one of three types: 1) a reasonable argument; 2) a bad type of argument, called a fallacy; or, perhaps worst of all, 3) an attempt to persuade without an argument, which is called non-argumentative persuasion.

**Tiffany:** Somehow, I thought that all of you philosopher types just sat around and asked dumb questions, like "how do I know that I really exist?"

**Socrates:** Well, there are many things that I like to question, but my existence is not one of them. Do you know how I generally respond to people who ask me how they can really know they exist?

**Tiffany:** How is that?

**Socrates:** I simply ask them, "Who wants to know?"

**Tiffany:** Well, that settles it for me.

**Socrates:** As it does for me. I must be off, but something tells me we will speak more later.

**A. DEFINE THE FOLLOWING TERMS:**

1. Fallacy:

---

---

2. Relevance:

---

---

3. Persuasion:

---

---

4. Propaganda:

---

---

**B. FURTHER RESEARCH:**

Write a short essay answering each of the following questions. Use available classroom resources, Internet sites, newspapers, or magazines.

1. How would you define the principle of relevance? Socrates has given you a few ideas. Give an example of an argument that is relevant and one that is not.
2. Find three examples of non-argumentative persuasion from newspapers, magazines, or books.
3. Create your own example of non-argumentative persuasion.





# Unit 1: Relevance

## Definitions Summary

**FALLACIES OF RELEVANCE:** These arguments have premises that do not “bear upon” the truth of the conclusions. In other words, they introduce an irrelevancy into the argument.

---

It is quite easy in a debate for someone to slip off-subject, leave behind the real issue, and begin arguing about something else. Sometimes we do this without meaning to because new subjects come up in a discussion and we want to address each subject. Sometimes, however, we start arguing about something besides the real issue because we sense that our argument for the real issue is weak. When we argue “around” the real issue we are committing a fallacy of relevance—we are veering off-topic and not staying relevant to the real issue.

There are three basic ways we “avoid the issue” and commit a fallacy of relevance: 1) We can criticize the source of an argument instead of the argument itself, 2) we can appeal to an emotion of some kind instead of addressing the real issue, and 3) we can make another argument (even a good one) but not address the issue that is at hand. The three basic groups of fallacies are listed below. You will be studying them throughout this unit.

### **A. *AD FONTEM* ARGUMENTS:** (Arguments against the source)

This subgroup consists of arguments that focus on the source of the argument, rather than on the issue itself.

1. ***Ad Hominem Abusive:*** In this most obvious of all personal attacks, the speaker assaults his rival with a great deal of abusive language in an attempt to avoid the issue. *Ad Hominem* means “to the man” in Latin.
2. ***Ad Hominem Circumstantial:*** Somewhat more subtle, this type of argument says, or implies, that the speaker’s rival should not be trusted in making his argument because of various circumstances regarding his rival. The most common version includes an implication that a person’s argument should be discounted because of his self-interest in the matter.
3. ***Tu Quoque:*** The person committing this fallacy assumes his rival’s recommendation should be discounted because he does not always follow it himself. *Tu Quoque* means “you also” in Latin.

4. **Genetic Fallacy:** This most generic version of an *ad fontem* argument states that an idea should be discounted simply because of its source or origin. In a sense, all of the arguments in this group are genetic fallacies, but the genetic fallacy label is generally used when the source being attacked isn't a specific person, but a people group or institution.

## B. APPEALS TO EMOTION:

All fallacies appeal to our emotions in some form or another, but the following fallacies do it in a particularly obvious way.

1. **Appeal to Fear (*ad baculum*):** Without making a clear causal connection, a person committing this fallacy references the potential for bad consequences to occur if the person to whom they are speaking does not agree with them. *Ad baculum* means “to the stick” in Latin.
2. **Appeal to Pity (*ad misericordiam*):** Using this type of argument, the speaker tries to convince others of his point of view by making them feel sorry for him or for other people. *Ad misericordiam* means “to pity” in Latin.
3. **Mob Appeal (*ad populum*):** To make up for a lack of solid evidence and sound reason, this tool, often used by demagogues,<sup>1</sup> appeals to the emotions of the crowd or to the “common man.” *Ad populum* means “to the people” in Latin.
4. **Snob Appeal:** This is an appeal to a sense of elitism or to those of “discriminating taste.”
5. **Appeal to Illegitimate Authority (*ad verecundiam*):** This is an attempt to shame the listener into agreement by citing an illegitimate authority. *Ad verecundiam* means “to shame” in Latin.
6. **Chronological Snobbery:** This is an appeal to something's age to justify either accepting or rejecting it.

## C. RED HERRINGS:

This category includes types of proofs that don't necessarily play on our emotions, but are nevertheless irrelevant to the situation.

1. **Appeal to Ignorance:** This argument makes the mistake of saying that because a proposition cannot be disproved, it must, therefore, be likely.
2. **Irrelevant Goals or Functions:** This is an argument that assumes a goal or function of a certain practice or policy is either unrealistic or irrelevant. Therefore, the practice or policy is not acceptable.
3. **Irrelevant Thesis:** This type of argument may make a fairly sound case for what it is trying to prove. However, what it is trying to prove is irrelevant to the case at hand.
4. **The Straw Man Fallacy:** This is an attempt to disprove an opponent's beliefs by presenting those beliefs in an inaccurate light.

---

1. A demagogue is a leader who obtains power by means of impassioned appeals to the emotions and prejudices of a population.

## Finding the Main Issue . . . and Asking the Right Questions

**DEFINITION:** Fallacies of relevance have premises that do not “bear upon” the truth of the conclusions, and therefore they introduce an irrelevancy into the argument.

Now, it is time to start a valuable project—the mastery of twenty-eight different fallacies. You will learn them so well that you will be able to recognize them in arguments, commercials, books, and conversations! The best way to remember them is to keep in mind which of the three great principles they violate. The first group of fallacies we are going to cover are the fallacies of relevance, which are those that violate the principle of relevance. We will start with a study of relevance because it is important to be able to determine the real issue in an argument and know when someone is trying to distract you from that issue. When you’re about to engage someone in an argument, the first thing you should be thinking about is the question of what is and what is not the real issue.

Fallacies of relevance have premises that, as the logician would put it, do not “bear upon” the conclusion. In other words, the premises do not have much to do with the issue at hand. While these fallacies all bring some irrelevant issue to the forefront, they sometimes can seem convincing. Usually, this is because they play upon our emotions. If we allow the speaker to get us stirred up emotionally, we are likely to miss the fact that his argument fails to provide good evidence for what he is trying to prove. Sometimes, what is being asserted in one of these fallacies is outrageous and unfair. At other times, it may be perfectly true and reasonable, yet it is still not relevant. The best response in this case is to simply say, “true, perhaps, but irrelevant.”

During the course of this book, you will learn to ask four key questions of any argument you encounter. These questions will help you detect and identify fallacies of relevance, presumption, and clarity. You should master the following questions:

### **First Question: What is the issue at hand?**

#### **Next Questions:**

- |             |   |  |
|-------------|---|--|
| Relevance   | → | Is the argument relevant to the issue at hand?   |
| Presumption | → | Is the argument assuming something illegitimate? |
| Clarity     | → | Is the argument clear?                           |

## Dialogue on Winning an Argument . . . Sort of, While Losing a Friend

*Socrates is sitting under a tree on campus when Tiffany suddenly comes up to him.*

**Tiffany:** Socrates! Boy am I glad to see you. Oooh . . . I'm so mad!

**Socrates:** Not at me, I hope. Perhaps I should make good my escape before it is too late.

**Tiffany:** No, no, not at you! I'm mad at my friend Mary. She's so argumentative.

**Socrates:** So Mary is quite contrary?

**Tiffany:** Yes, but it's not just that she likes to argue, but *how* she likes to argue.

**Socrates:** How is that?

**Tiffany:** She always makes me feel like I have absolutely no business having any views at all. When the issue of welfare reform comes up, she implies that I couldn't possibly know what I'm talking about, since I've never been poor. When the issue of race comes up, she says that I couldn't possibly have anything useful to add, since I'm a member of the dominant ethnic group. Once, we were talking about abortion, and she told my boyfriend he shouldn't be allowed to comment because he's a man!

**Socrates:** So, how does this make you feel?

**Tiffany:** Well, I guess sometimes it makes me feel a little intimidated and off-balance.

**Socrates:** Does it make you want to exploring the issue further with her?

**Tiffany:** Certainly not! It makes me feel as though I don't want to talk with her at all.

**Socrates:** But does it help her win arguments?

**Tiffany:** Well . . . sort of. I guess that depends on what you mean by winning.

**Socrates:** Well, how would you define the term "winning"?



**Tiffany:** Hmm . . . I've never really thought about what it means to win an argument before. What do you think it means? Oh, here's my boyfriend, Nate. Nate, meet my good friend, Socrates!

**Nate:** Pleased to meet you.

**Socrates:** The pleasure is all mine.

**Nate:** I overheard your conversation. Suppose you tell us what your definition of victory in argument is.

**Socrates:** Why, certainly. There are different ways of looking at this, I suppose. Let's try on a couple for size and see how they fit, shall we?

**Tiffany:** Sure.

**Socrates:** First, let's start by comparing arguments to battles. Do you know what the traditional definition of victory in battle is?

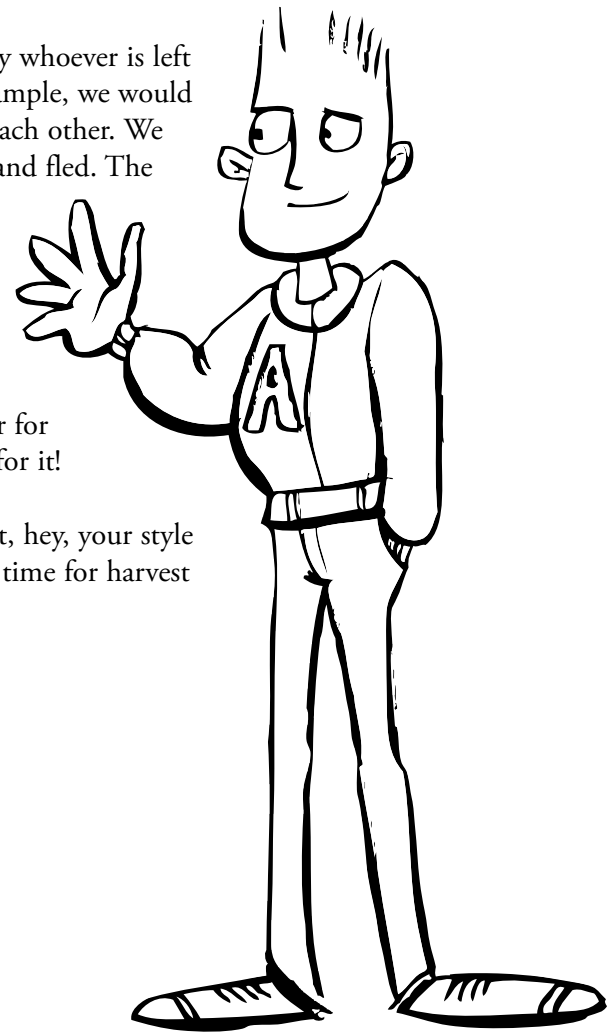
**Tiffany:** No. What is it?

**Socrates:** Traditionally, victory in battle is said to be won by whoever is left in command of the battlefield afterward. In my day, for example, we would all line up in a big, long shield wall and charge straight at each other. We did this until one group proved weaker, or lost their nerve and fled. The winner would lose very few men and the loser would take enormous casualties.

**Nate:** That sounds like a stupid way to wage war. Why didn't you just hunker down behind your city walls, or make use of all those steep mountains and thick forests to wage a never ending guerilla war like America did in its war for independence? The Greek terrain would have been perfect for it!

**Socrates:** Well, yes, I guess it was a little unsubtle of us, but, hey, your style of waging warfare would have made it hard to get home in time for harvest season.

**Tiffany:** *Touché.*



**Socrates:** Anyway, as I was saying, the losers would humiliate themselves by having to ask for permission to bury their dead. That's the difference between defeat and victory: whether or not you maintain control of the battlefield. So the next question is, "Does your friend Contrary Mary consistently find herself in command of the battlefield?" If that is so, then she obviously wins arguments.

**Nate:** I don't know about that. While I guess whoever has control of the battlefield has won a technical victory, I don't know whether that is really always the best measure. One could win a "Pyrrhic victory," for example.

**Socrates:** A "Pyrrhic victory"? I don't believe that I'm familiar with that term.

**Nate:** Well, it comes from a famous general who lived after your time. His name was Pyrrhus of Epirus, and he was known as the finest tactician of his age. He beat the Romans twice, at least technically, but lost so many men that he had to withdraw to friendlier territory. In fact, when his generals tried to congratulate him on his victory, he is reported to have said, "Another such victory and I shall be finished." When Mary cows and intimidates others into backing down, she may be displaying her command of argumentative techniques, but is she really succeeding in getting others to appreciate her point of view?

**Tiffany:** Yeah, that makes me wonder what the purpose of arguing for your ideas with people is in the first place. If it's to "maintain control of the battlefield," then sure, any old sophism<sup>1</sup> will do. But if it's to actually convince others that you are right in your ideas, then you have to fight fair.

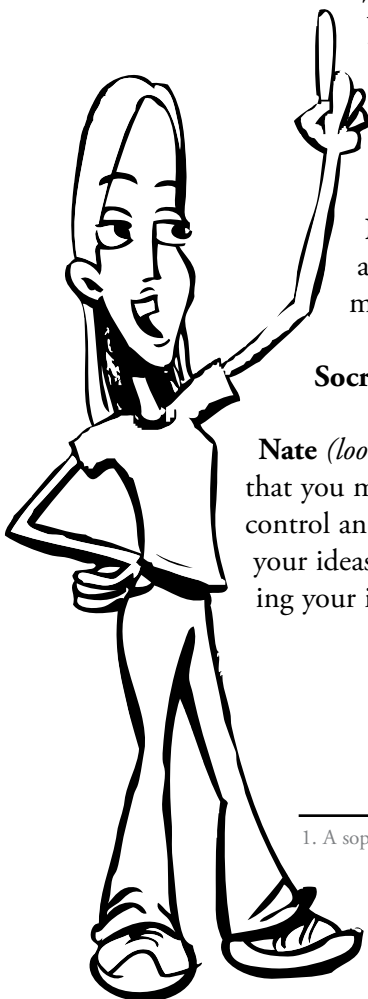
**Nate:** The whole warfare analogy just doesn't fit here, anyway. After all, "all's fair in love and war," but I certainly think that Mary's argumentative tactics are unfair.

**Socrates:** But, then, is all really fair in both war and love?

**Nate** (*looking sheepishly at Tiffany*): OK, I guess all isn't really fair in love, now that you mention it. But, look, my point is that while the goal in warfare is to control and coerce others, the goal of arguing is to convince others to accept your ideas of their own free will by presenting to them good reasons for accepting your ideas.

---

1. A sophism is a plausible but fallacious argument. This kind of argumentation is called sophistry.



**Socrates:** Spoken like a true philosopher! I'm beginning to like this friend of yours, Tiffany. That was precisely the point to which I was hoping to bring this little dialectical exercise. So that brings us back to your friend Contrary Mary's approach. If the goal is to get others to want to change their minds and accept a new point of view, does she succeed?

**Tiffany:** Certainly not! It makes my resistance to her ideas stiffen.

**Socrates:** Which brings us back full circle to the question of how arguing with Mary makes you feel. Her argument fails at a rhetorical level, because it alienates her audience. It makes them not want to listen. But that isn't even the worst of it. It also fails on a logical level. Can you think of the great principle of critical thinking that we talked about the other day that her arguing approach violates?

**Tiffany:** That's easy. It fails the test of relevance. Just because Nate is a man, that doesn't mean his argument about whether or not a fetus is a person is wrong. When she tried to shove Nate's argument aside just because he is a man, she was really just putting up a smokescreen to hide behind.

**Socrates:** Absolutely! In fact, in all three of the examples you mentioned, she was committing the *ad hominem* circumstantial fallacy.

**Nate:** *Ad hominem* . . . doesn't that mean "to the man" in Latin?

**Socrates:** Precisely! The *ad hominem* fallacies are a group of fallacies that are committed when the arguer distracts his listeners from what should be the main issue by attacking, or deflecting attention to, his opponent and avoiding the real issue. In the *ad hominem* circumstantial fallacy, someone tries to say that someone with whom they disagree should be ignored because of the circumstances surrounding them.

**Nate:** But aren't there times when the **credibility** of the messenger matters?

**Socrates:** Well, yes, there are such times. But the general rule is that you are to avoid making your argument center around the man, and stick to the issue. After all, attacking the person rather than tackling the issue is a good way to "win" the argument and lose a friend.

**Nate:** Sounds like sage advice to me. We need to get going now, but it's been great getting to talk to you!

**Socrates:** The feeling is mutual, I assure you.

# Chapter 1

## The *Ad Fontem* Arguments (Arguments Against the Source)

CHAPTER

1

**DEFINITION:** A subgroup of the fallacies of relevance, these arguments distract by focusing attention on the source of the argument, rather than on the issue itself.

Due to the large number of relevance fallacies, they are divided into subgroups. We will start with the subgroup of *ad fontem* arguments (sometimes referred to as “personal attacks”) because they are some of the easier ones to spot.

The Latin phrase *ad fontem* can be translated as “to the source.” (Literally, it means “to the fountain,” or “the source of a stream.”) Distracting your audience’s attention to the source of an argument, and away from the real issue, is a very common debater’s trick. Most of these fallacies can also be referred to as *ad hominem* arguments or “personal attacks.” However, not all of these arguments are aimed at a specific person. Therefore, it is important to recognize these sorts of fallacies regardless of whether they are aimed at one specific person, a group of people, or even a broader set of ideas.

### Vocabulary:

- *Ad Fontem* Arguments
- *Ad Hominem*
- *Ad Hominem* Abusive
- *Ad Hominem* Circumstantial
- *Tu Quoque*
- Genetic Fallacy

*Ad hominem* can be translated as either “to the man” or “against the man.” In either case, it refers to arguments that distract from the issue at hand by attacking one of the parties that are arguing. A speaker may be self-interested, not completely informed, or even a downright bad person, but that does not change the fact that his argument needs to be weighed on its own merits. Most of the time, an *ad hominem* argument is in some way unfair to whom it attacks. After all, an *ad hominem* argument is one of the “dirtiest” tricks in the debater’s book. However, even if it is perfectly fair and accurate, it is still irrelevant. There are several different types of *ad fontem* arguments, but in this book we will cover just four.