“Most people are unable to write because they are unable to think.” – H.L. Mencken

Rhetoric, Logic, & Argumentation is a guide to the basic elements of communication and reasoning that every student writer should understand. Beginning with an overview of the three rhetorical appeals—ethical, pathetic, and logical—the book goes on to emphasize the importance of the logical approach to argumentation, introducing readers to the principles of deductive and inductive reasoning and a variety of common logical fallacies. This book, which also includes exercises, will equip readers with the tools of analysis and persuasion that are essential to both clear thinking and effective communication.
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In the modern language-arts classroom, students are trained in the basics of grammar, writing, and reading comprehension, but they are often left to fend for themselves when it comes to the more difficult tasks of analysis and persuasion. Students are often required to form and analyze arguments without ever having been taught the basic rules of reasoning, and they’re asked to express their arguments in a compelling style without having learned any of the established techniques of rhetorical persuasion.

Taking a cue from the classical approach to education, with its emphasis on rhetoric and logic, Rhetoric, Logic, and Argumentation explains some of the essential approaches to communication and reasoning that any student writer should understand. Beginning with an introduction to the three rhetorical appeals (ethical, pathetic, and logical), the book goes on to explain the basics of logic, introducing students to deductive and inductive reasoning, and a variety of common logical fallacies. This guide provides students with the tools they will need to both analyze the arguments they encounter and compose their own persuasive messages. After completing this book and the accompanying exercises, students should find that they have a greater command of the techniques of argumentation and a more purposeful approach to writing.

**Reader’s Notes:** Terms that appear in bold italics on their first occurrence are defined in the glossary at the back of the book. Many of these terms have been used in past AP Language and Composition Examinations.
There are many definitions for the term rhetoric, but Plato may have put it best when he described it as “the art of ruling the minds of men.” In more literal terms, rhetoric can be defined as “the technique or study of communication and persuasion.” The study of rhetoric is an immense topic, but this book will cover the basic modes of persuasive communication.

First, there are three main elements to consider in crafting an argument: the speaker, the audience, and the message. All efforts at communication focus on one or more of these elements. In this book, we use the term “speaker” for the individual who is delivering the message, whether in writing, speech, or another medium. The “audience” is the person or group of people who will receive the “message”—the information the speaker attempts to convey to the audience.

**speaker:** the individual who is delivering the message, whether in writing, speech, or another medium (i.e., the writer, orator, or presenter)

**audience:** the person or people who receive the message (i.e., the readers, listeners, or observers)

**message:** the information the speaker wishes to convey to the audience (i.e., the argument, topic, or thesis)

A skilled communicator will keep each of these three components in mind while formulating and presenting an argument. The three elements are often depicted as parts of a triangle, which illustrates their mutually supportive relationship. Just as a triangle has three sides, a well-crafted message will consider each of these three factors.
In Harper Lee’s *To Kill a Mockingbird*, attorney Atticus Finch defends a black client who has been charged with raping a white woman in 1930s Alabama. The following passage is an excerpt from Atticus’s closing argument before an all-white jury, taken from the film adaptation of the novel. In this speech, Atticus summarizes his claim that the alleged victim of the crime has falsely accused the defendant, Tom Robinson, to cover up her own romantic interest in him.

Read the following speech carefully. Then, identify and describe Atticus’s methods in presenting his appeals to pathos. Be sure to name the specific emotional tones that Finch’s words elicit, using examples from the text to illustrate your points.

Note to teachers: Student responses will vary, but may include some of the points that follow in the margin notes.

**Exercise: Analysis**

Initially, Atticus portrays Mayella Ewell as a victim, deserving of his and the jury’s pity. Realizing that the jury will probably be inclined to take her side, he attempts to evoke sympathy toward her, rather than anger.

By using the emotionally charged phrase “putting a man’s life at stake,” Atticus expresses the dire importance of the situation at hand.

In an effort to awaken a sense of moral outrage in the jurors, Atticus suggests that Mayella is attempting to destroy and dispose of a human being.

By describing Tom in these positive terms and pointing out his disadvantaged position in the trial, Atticus invites the audience’s sympathy.

Atticus demonstrates enthusiasm for the ideals of justice and morality, hoping to inspire the jurors.

He ends the argument with a desperate plea to the jurors, appealing to both their sympathy and their sense of honor.

**I have nothing but pity in my heart for the chief witness for the State. She is the victim of cruel poverty and ignorance. But my pity does not extend so far as to her putting a man’s life at stake, which she has done in an effort to get rid of her own guilt. Now I say “guilt,” gentlemen, because it was guilt that motivated her. She’s committed no crime. She has merely broken a rigid and time-honored code of our society—a code so severe that whoever breaks it is hounded from our midst as unfit to live with. She must destroy the evidence of her offense. But what was the evidence of her offense? Tom Robinson, a human being. She must put Tom Robinson away from her. Tom Robinson was to her a daily reminder of what she did. Now, what did she do? She tempted a Negro. She was white, and she tempted a Negro. She did something that, in our society, is unspeakable. She kissed a black man . . . .**

**And so, a quiet, humble, respectable Negro, who has had the unmitigated temerity to feel sorry for a white woman, has had to put his word against two white people’s. The defendant is not guilty, but somebody in this courtroom is.**

**Now, gentlemen, in this country, our courts are the great levelers. In our courts, all men are created equal. I’m no idealist to believe firmly in the integrity of our courts and of our jury system. That’s no ideal to me. That is a living, working reality! Now I am confident that you gentlemen will review without passion the evidence that you have heard, come to a decision and restore this man to his family. In the name of God, do your duty. In the name of God, believe Tom Robinson.**
Why Logic Is Essential to Writing

As humans, we are born with the potential to think rationally. We have a remarkable capacity for inferring meaning and drawing conclusions. Unfortunately, despite its incredible potential for rational thought, the human mind is naturally predisposed to certain kinds of errors. As we will discuss further in the next chapter, all human beings are innately biased in favor of specific kinds of illogical thought patterns.

That’s why it’s important that we use caution when we express our own ideas or consider the ideas of others; we must guard against passively receiving or carelessly expressing thoughts without first subjecting them to some level of rational scrutiny. It’s important that we read and write with an awareness of our mental weaknesses and the weaknesses of others to avoid being persuaded by illogical arguments or making them ourselves.

Fortunately for us, there are systematic methods for studying and assessing the various categories and components of thought and expression to combat the innate shortcomings of the human mind. We have developed a unique language—the language of logic—that enables us to identify and describe the different kinds of thought we use, the components of arguments, and the types of errors in reasoning that people often commit.

The remaining chapters of this book explain some of the fundamental principles of rational thought and argumentation to equip you for the tasks of reading critically and writing rational, well-thought-out arguments. In the following chapters, you will learn to recognize deductive and inductive argument forms, while gaining experience in recognizing and responding to some of the most common kinds of errors in reasoning. This practice should enable you to assess information in a logical manner, form solid, well-thought-out arguments, and dismantle the many faulty arguments you may encounter, whether in the academic world or in real life.

But first, it’s important to understand the enemy that lies within: cognitive biases. In the following chapter, we’ll explore some of the ways our minds can deceive us.
Deductive vs. Inductive Arguments

Our patterns of thought can be broken down into two main categories: **deductive and inductive reasoning**.

We’ll talk about each category in greater detail in the following chapters. But first, let’s briefly look at the basic definition of each kind of reasoning and see what distinguishes them from one another.

**Deductive Reasoning**

In deductive reasoning, we begin by proposing a set of principles. We then form conclusions by making logical inferences from these principles. The conclusion of a properly formed deductive argument is a logical consequence of the premises—it must be true if the premises are true. The conclusion will not add any new information to the argument; instead, it will simply combine the principles stated in the premises.

**Example:**

1. All teachers assign homework.
2. Mrs. O’Neil is a teacher.
3. Therefore, Mrs. O’Neil assigns homework.

As this example illustrates, valid deductive arguments are designed in such a way that if the premises are true, the conclusion must also be true by definition.

One common method of recognizing deductive arguments is to look for conclusions that are more specific than the premises—in other words, an argument that progresses from the general to the specific.

**General → Specific**

The conclusion of a deductive argument is more specific than the premises in the sense that it is limited in scope by the information the premises provide.

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*A third category of thought, abductive reasoning, is a precursor to deductive and inductive thought. Abductive reasoning is the process of developing a hypothesis or a “hunch” based on a limited amount of information. The hypotheses that result from abductive thinking can be tested only through deductive or inductive reasoning; for that reason, abduction is not discussed in this book.*
Each of the following arguments is unsound. Explain why each argument is unsound by identifying its form as valid or invalid and its premises as true, untrue, or indeterminate (if the truth value cannot be determined).

1. All deductive arguments are valid.
   This is a deductive argument.
   Therefore, this argument is valid.

2. All men are mortal.
   Socrates is mortal.
   Therefore, Socrates is a man.

3. All doctors have degrees.
   Fred has a degree.
   Therefore, Fred is a doctor.
1. Socrates is Greek. (S is G.)
2. Some men are Greek. (Some M are G.)
3. Therefore, Socrates is a man. (S is an M.)

The one identifying feature of an argument that commits this fallacy is the fact that the argument is clearly deductive, but it is not valid—the truth of its premises does not logically require the truth of its conclusion. In the previous argument, for example, although Socrates is indeed Greek, and although some men are Greek, these facts do not necessitate the conclusion (which happens to be true) that Socrates is a man. Based on the premises in this argument, he could just as easily be a Greek olive, the Parthenon, or the city of Athens.

Outside the discipline of logic, the term “non sequitur” is also used to refer to a comedic device in which the speaker connects seemingly random ideas. In this line from the 1930 movie Animal Crackers, Groucho Marx\textsuperscript{12} delivers an example of a humorous non sequitur.

\textit{Well, Art is Art, isn’t it? Still, on the other hand, water is water. And east is east and west is west and if you take cranberries and stew them like applesauce, they taste much more like prunes than rhubarb does. Now you tell me what you know.}

This speech is funny in part because it mimics the non sequitur style of reasoning. Groucho connects his observations as one might connect premises in an argument. But, as anyone can see, his thoughts are completely disjointed and prove nothing.

Unlike this argument, which is intended to be humorous, most non sequitur arguments you’ll encounter in real life are subtle and difficult to detect. The simplest way to identify a non sequitur argument is to first evaluate whether the argument is deductive—claiming that its premises prove its conclusion with absolute certainty—and then determine whether the premises actually leave room for doubt.

\textsuperscript{12} Stage name of comedian Julius Henry Marx
Exercise 4: Evaluation

The following passage is an excerpt from Abraham Lincoln’s “Fragment on Slavery,” dated July 1, 1854. In this deductive argument, Lincoln discusses one factor that was often used to justify slavery in the United States: differences in skin color. Read the passage carefully. Then, restate the argument in your own words. Finally, determine whether the argument is a valid deductive argument or an example of the non sequitur fallacy. Explain your answer.

If A. can prove, however conclusively, that he may, of right, enslave B.—why may not B. snatch the same argument, and prove equally, that he may enslave A? You say A. is white, and B. is black. It is color, then; the lighter, having the right to enslave the darker? Take care. By this rule, you are to be slave to the first man you meet, with a fairer skin than your own.
Red Herring: Throwing the hounds off the scent

A red herring argument diverts attention from the true issues of a debate by emphasizing irrelevant information.17

The idiomatic use of the term “red herring” has its origins in the practice of using fish to train hunting dogs. At one time, it was common practice for English fox hunters to use the reddish-colored flesh of smoked herring to create false trails for their hounds to follow, thus training the dogs to follow a scent. Through this association, the term “red herring” has become a shorthand metaphor for any diversionary tactic that essentially creates a “false trail.”

The red herring fallacy is often used to divert attention from a weakly presented or ill-founded argument. The following dialogue from Fyodor Dostoevsky’s The Brothers Karamazov contains a humorous example of the use of the red herring technique in a poorly reasoned argument. In the bolded passage, we see an illustration of how the red herring fallacy often appears in casual conversation. In this instance, the speaker, Fyodor Karamazov, attempts to cast doubt on the concept of Hell by arguing that it can exist only if it has a ceiling and if its demons are equipped with hooks. Lacking a logical defense for his skepticism over the concept of Hell, he grasps for a defense through these inconsequential details.

So you want to be a monk? . . . . You’ll pray for us sinners; we have sinned too much here. I’ve always been thinking who would pray for me, and whether there’s anyone in the world to do it . . . . It’s impossible, I think, for the devils to forget to drag me down to hell with their hooks when I die. Then I wonder—hooks? Where would they get them? What of? Iron hooks? Where do they forge them? Have they a foundry there of some sort? The monks in the monastery probably believe that there’s a ceiling in hell, for instance. Now I’m ready to believe in hell, but without a ceiling. It makes it more refined, more enlightened, more Lutheran that is. And, after all, what does it matter whether it has a ceiling or hasn’t? But, do you know, there’s a damnable question involved in it? If there’s no ceiling there can be no hooks, and if there are no hooks it all breaks down, which is unlikely again, for then there would be none to drag me down to hell, and if they don’t drag me down what justice is there in the world? Il faudrait les inventer,18 those hooks, on purpose for me alone, for, if you only knew, Alyosha, what a blackguard I am.

17 In addition to being the name of a logical fallacy, the term “red herring” also describes a device often used in suspense literature, such as mystery novels. In the literary context, a “red herring” is usually a misleading set of clues the author includes to keep readers from guessing a surprise ending, such as the revelation of the murderer’s identity at the end of the novel.

18 “It would be necessary to invent them.”
abductive reasoning: a precursor to deductive and inductive thought; the process of developing a hypothesis or a “hunch” based on a limited amount of information

ad hominem: a kind of red herring fallacy; suggests that an argument should be rejected on the basis of some irrelevant quality of the speaker

ambiguous: having more than one possible meaning or interpretation

analogy: compares two or more unlike objects on the basis of a shared quality

argument by analogy: claims that since two items have a given attribute in common, they must also share a second, distinct point of similarity; an argument of the form:
1. A is like B.
2. B has property X.
3. Therefore, A also has property X.

weak analogy: fallacy in which the differences between the objects of comparison in an analogy are so significant that they actually defeat the argument, and the comparison between the two items does not lead to the conclusion given

appeal to ethos / ethical appeal: see “ethos”

appeal to logos / logical appeal: see “logos”

appeal to pathos / pathetic appeal: see “pathos”

argument: in logic, a set of connected statements (known as “premises”) that are meant to prove a particular conclusion

argument by analogy: see “analogy”

argument from authority: an argument that places undue emphasis on the opinion of the speaker or another presumed expert, committed when a speaker gives great weight to the opinion of an “expert” who is not really an authority on the subject at hand, or when the speaker treats the mere opinion of an expert as infallible proof

audience: the person or people who receive the message (i.e., the readers, listeners, or observers)