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Chapter I

Short Arguments: Some General Rules

Rule 1

Arguments begin by marshaling reasons and organizing them in a clear and fair way. Chapter I offers general rules for composing short arguments. Chapters II–VI discuss specific *kinds* of short arguments.

Identify premises and conclusion

The very first step in making an argument is to ask yourself what you are trying to prove. What is your conclusion? Remember that the conclusion is the statement for which you are giving reasons. The statements that give your reasons are your *premises*.

Consider these lines from Winston Churchill:

I am an optimist. It does not seem to be much use being anything else.

This is an argument—as well as an amusing quip—because Churchill is giving a *reason* to be an optimist: his premise is that “It does not seem to be much use being anything else.”

Premises and conclusion are not always so obvious. Sherlock Holmes has to explain one of his deductions in “The Adventure of Silver Blaze”:

A dog was kept in the stalls, and yet, though someone had been in and fetched out a horse, [the dog] had not barked. . . . Obviously the . . . visitor was someone whom the dog knew well.¹

Holmes has two premises. One is explicit: the dog did not bark at the visitor. The other is a general fact that Holmes assumes we know about dogs: dogs bark at strangers. Together these premises imply that the visitor was not a stranger. It turns out that this is the key to solving the mystery.

When you are using arguments as a means of inquiry, you sometimes may start with no more than the conclusion you wish to defend. State it clearly, first of all. Maybe you want to take Churchill a step farther and

1. Sir Arthur Conan Doyle, “The Adventure of Silver Blaze,” in *The Complete Sherlock Holmes* (Garden City, NY: Garden City Books, 1930), p. 199.

argue that you and I should be optimists too. If so, say so explicitly. Then ask yourself what reasons you have for drawing that conclusion. What reasons can you give to prove that we should be optimists?

You could appeal to Churchill's authority. If Churchill recommends optimism, who are we to quibble? This appeal will not get you very far, however, since equally famous people have recommended pessimism. You need to think about the question on your own. Again, what is *your* reason for thinking that we should be optimists?

One reason could be that optimism boosts your energy to work for success, whereas if you feel defeated in advance you may never even try. Optimists are more likely to succeed, to achieve their goals. (Maybe this is what Churchill meant as well.) If this is your premise, say so explicitly.

This book offers you a ready list of different forms that arguments can take. Use this list to develop your premises. To defend a generalization, for instance, check Chapter II. It will remind you that you need to give a series of examples as premises, and it will tell you what sorts of examples to look for. If your conclusion requires a deductive argument like those explained in Chapter VI, the rules outlined in that chapter will tell you what types of premises you need. You may have to try several different arguments before you find one that works well.

Exercise Set 1.1: Distinguishing premises from conclusions

Objective: To give you practice distinguishing premises from conclusions in other people's arguments.

Instructions: Rewrite each argument below, underlining the conclusion of each argument and putting brackets around each premise.

Tips for success: Distinguishing premises from conclusions is sometimes more of an art than a science. We wish people were always clear about the premises and conclusions of their argument, but that's just not the case. Therefore, learning to distinguish premises from conclusions takes practice. As you practice, there are two strategies that you should keep in mind.

The first strategy is simply to ask yourself what the author of this argument is trying to convince you to believe. The claim that the author is trying to get you to believe is the argument's conclusion. Then you can ask what *reasons* the author gives to try to convince you. These will be the argument's premises.

The second strategy for distinguishing premises from conclusions is to look for *indicator words*. Some words or phrases are *conclusion indicators*. These are words or phrases that tell you that you're about to read or hear the conclusion of an argument. Other words or phrases are *premise indicators*. These tell you that you're about to read or hear a premise. Here's a sample of the most common conclusion and premise indicators:

Conclusion Indicators	Premise Indicators
therefore	because
thus	since
hence	given that
so	for
consequently	on the grounds that
this shows that	this follows from

You'll start to notice more indicator words as you get better at analyzing arguments.

Two more pieces of advice: First, don't rely solely on indicator words. Some arguments will not use any indicator words. Others will use indicator words in other ways. Some words, like *because*, *since*, and *so*, have many other uses; not every use of *because* indicates that you're about to hear a premise. When in doubt, fall back on our first strategy: ask yourself whether the author is giving you a reason for the conclusion. If your answer is no, you haven't found a premise, even if the sentence includes *because* or *since*.

Second, don't assume that everything in a passage is either a premise or a conclusion. Not all passages contain arguments. Some passages are telling stories, describing things, giving explanations, issuing commands, making jokes, or doing other things besides giving reasons for a conclusion. Even in passages that do contain arguments, some sentences or clauses will provide background information, make side comments, and so on. Again, the key is to ask yourself, "Is this sentence stating a conclusion or giving me a reason to believe that conclusion?" If it is doing either, it's part of an argument; if not, it's not.

Sample

[In order to prosper, a democracy needs its citizens to be able to carry out their responsibilities competently.] [Being a competent citizen requires familiarity with the basics of math, natural science, social science, history, and literature, as well as the ability to read and write well and the ability to think critically.] [A liberal education is essential to developing these skills.] Therefore, in order for a democracy to prosper, its citizens must get a liberal education.

*Adapted from: Steven M. Cahn, letter to the editor, New York Times,
May 21, 2004*

The markings in this sample problem indicate that the last sentence is the conclusion and that each of the first three sentences is a separate premise. Although each sentence in this letter to the editor expresses either a premise or a conclusion, remember that many passages contain sentences (or parts of sentences) that are neither premises nor conclusions. You don't need to bracket or underline those (parts of) sentences.

1. Racial segregation reduces some persons to the status of things. Hence, segregation is morally wrong.

*Adapted from: Martin Luther King, Jr., "Letter from a Birmingham Jail,"
Liberation: An Independent Monthly, Jun 1963*

2. While performing an autopsy on a dead sea turtle, Dr. Stacy found shrimp in the turtle's throat. Sea turtles can only catch shrimp if they are stuck in nets with the shrimp. Therefore, the dead sea turtle was probably caught in a net.

*Adapted from: Shaila Dewan, "Animal Autopsies in Gulf Yield Mystery,"
New York Times, Jul 14, 2010, <http://www.nytimes.com/2010/07/15/science/earth/15necropsy.html>*

3. Most people experience no side effects from the yellow fever vaccine. People with egg allergies shouldn't get the yellow fever vaccine, though, because some part of the vaccine is grown inside eggs.

*Adapted from: Division of Vector Borne Infectious Diseases, "Vaccine | CDC Yellow Fever," Centers for Disease Control and Prevention,
<http://www.cdc.gov/ncidod/dvbid/YellowFever/vaccine/>*

4. There are two ways of settling a dispute: by discussion and by physical force. Since the first way is appropriate for human beings and the second way appropriate for animals, we must resort to force only when we cannot settle matters by discussion.

Adapted from: Cicero, De Officiis 11

5. Positron-emission tomography, better known as PET, is a method for examining a person's brain. Before undergoing PET, the patient inhales a gas containing radioactive molecules. The molecules are not dangerous for the patient because they break down within a few minutes, before they can do any damage.

Adapted from: Bryan Kolb and Ian Q. Wishaw, Fundamentals of Human Neuropsychology, 5th ed. (New York: Worth Publishers, 2003), 161

6. The head of the spy ring is very dangerous. He is also exceptionally clever and a master of disguise. He has a dozen names and a hundred different appearances. But there is one thing he cannot disguise: he is missing the tip of his little finger. So, if you ever meet a man who is missing the top joint of his little finger, you should be very careful!

Adapted from: The 39 Steps, directed by Alfred Hitchcock (London: Gaumont British, 1935)

7. Some people buy college degrees on the Internet because they're trying to pretend that they went to college. That's a waste of money, since it's easy to make a college degree on your computer, and a degree that you make yourself is just as good as a degree that you bought on the Internet.

Adapted from: "Fake Degrees in Government," The Onion, Oct 18, 2006, <http://www.theonion.com/articles/fake-degrees-in-government,15092/>

8. People are created equal and endowed with unalienable rights. Governments exist to protect those rights. When a government violates those rights, people have a right to rebel against that government and create a new one. The king of Great Britain has repeatedly violated the rights of the American colonists. Thus, the American colonists have a right to rebel against the king of Great Britain.

Adapted from: U.S. Declaration of Independence

Rule 2: Develop your ideas in a natural order

9. It shouldn't surprise anyone that charter schools associated with the public school system perform better than those that operate on their own. Although the public-school bureaucracy can sometimes make it hard to get things done, it also provides invaluable support and services to the charter schools that are associated with it. I don't see why some people are intent on destroying the public-school system.

*Adapted from: Paul Kelleher, letter to the editor, New York Times, Sep 1, 2006,
<http://query.nytimes.com/gst/fullpage.html?res=9C03E7D81E3EF932A3575AC0A9609C8B63>*

10. The only remaining question was why the man had been murdered. Was it a politically motivated crime or a private one? I thought right away that it must be a privately motivated crime. Political assassins move quickly and flee. But in this case, the murderer's footprints are all over the room, showing that he had spent quite a while in this room.

Adapted from: Arthur Conan Doyle, A Study in Scarlet (London: Ward Lock & Co., 1888; repr., London: Penguin, 2001), 138

Need more practice? Take a look at the editorials, op-eds, and letters to the editor on the Web site for your favorite newspaper. Most of these will contain arguments. Working by yourself or with a classmate, identify the premises and conclusions in those arguments.

Rule 2

Develop your ideas in a natural order

Short arguments are usually developed in one or two paragraphs. Put the conclusion first, followed by your reasons, or set out your premises first and draw the conclusion at the end. In any case, set out your ideas in an order that unfolds your line of thought most clearly for the reader.

Consider this short argument by Bertrand Russell:

The evils of the world are due to moral defects quite as much as to lack of intelligence. But the human race has not hitherto discovered any method of eradicating moral defects. . . . Intelligence, on the contrary, is easily improved by methods known to every competent educator. Therefore, until some

method of teaching virtue has been discovered, progress will have to be sought by improvement of intelligence rather than of morals.²

Each sentence in this passage prepares the way for the next one, and then the next one steps smoothly up to bat. Russell begins by pointing out the two sources of evil in the world: “moral defects,” as he puts it, and lack of intelligence. He then claims that we do not know how to correct “moral defects,” but that we do know how to correct lack of intelligence. Therefore—notice that the word “therefore” clearly marks his conclusion—progress will have to come by improving intelligence.

Getting an argument to unfold in this smooth sort of way is a real accomplishment. It’s not easy to find just the right place for each part—and plenty of wrong places are available. Suppose Russell instead argued like this:

The evils of the world are due to moral defects quite as much as to lack of intelligence. Until some method of teaching virtue has been discovered, progress will have to be sought by improvement of intelligence rather than of morals. Intelligence is easily improved by methods known to every competent educator. The human race has not hitherto discovered any means of eradicating moral defects.

These are the same premises and conclusion, but they are in a different order, and the word “therefore” has been omitted before the conclusion. Now the argument is much harder to understand, and therefore also much less persuasive. The premises do not fit together naturally, and you have to read the passage twice just to figure out what the conclusion is. Don’t count on your readers to be so patient.

Expect to rearrange your argument several times to find the most natural order. The rules discussed in this book should help. You can use them to figure out not only what kinds of premises you need but also how to arrange them in the best order.

2. Bertrand Russell, *Skeptical Essays* (1935; repr., London: Allen & Unwin, 1977), p. 127.

Exercise Set 1.2: Outlining arguments in premise-and-conclusion form

Objective: To give you practice rewriting arguments in a clear, logical structure.

Instructions: Each of the following passages contains an argument. Put the premises in a natural, meaningful order, and write them out in a numbered list. Then, write the conclusion at the end of the list.

Tips for success: It's often helpful to outline arguments in premise-and-conclusion form. This involves several steps.

First, identify the premises and the conclusions, just as you did in Exercise Set 1.1.

Then, put the premises in a meaningful order—that is, an order that helps you understand how the premises connect with one another and with the conclusion. In many cases, there won't be a single best ordering. Try a few different orderings and pick the one that makes the most sense to you.

When you have settled on a meaningful order for the premises, write the premises down in a numbered list. It's helpful to make each premise a complete sentence, replacing pronouns like *him* or *it* with the names of the people or things they stand for.

Finally, write the conclusion at the end of the list. Some logicians draw a line between the premises and the conclusion, much like the line that mathematicians draw between an arithmetic problem and its answer. This line shows that the premises “add up” to the conclusion. Other logicians write *therefore* or include the symbol \therefore (which means *therefore*) before the conclusion.

Sample

Some companies are creating genetically modified animals, such as salmon, that provide more meat for consumers. If genetically modified salmon escaped into the wild, they would compete with “natural” salmon for food. Natural salmon, though, have been honed by natural selection to flourish in the wild. Genetically modified salmon are not designed to flourish in the wild. Thus, non-genetically modified salmon would outcompete genetically modified salmon if genetically modified salmon escaped into the wild.

Adapted from: “Dawn of the Frankenfish,” The Economist, Jun 10, 2010

- (1) If genetically modified animals escaped into the wild, they would compete with “natural” salmon for food.
- (2) Natural salmon have been honed by natural selection to flourish in the wild.
- (3) Genetically modified salmon are not designed to flourish in the wild.
- Therefore, (4) Non-genetically modified salmon would outcompete genetically modified salmon if genetically modified salmon escaped into the wild.

This argument already presents its ideas in a natural order. The only thing needed to put it into premise-and-conclusion form is to identify the premises, put them in a numbered list, and add “therefore” before the conclusion.

The first sentence in the passage is not a premise in the argument. Its purpose is to provide context for the argument, not to give a reason to accept the conclusion. We do not need to include it in our outline of the argument.

1. As a basketball player, Michael Jordan had a unique combination of grace, speed, power, and competitive desire. He had more NBA scoring titles than anyone else. He retired with the NBA’s highest scoring average. Therefore, Michael Jordan is the greatest basketball player of all time.

Adapted from: NBA, “Michael Jordan Bio,” NBA Encyclopedia Playoff Edition, n.d., http://www.nba.com/history/players/jordan_bio.html

2. Someone who can’t get enough to eat clearly lives in poverty. But someone who can’t afford the things that his or her society regards as necessities also lives in poverty. Wealthier societies will regard more things as necessities than poorer societies. Thus, the

Rule 2: Develop your ideas in a natural order

“poverty line,” which is the amount of money someone must have to count as “non-poor,” will be higher in a wealthier society than in a poorer society.

Adapted from: David Phillips, Quality of Life: Concept, Policy, and Practice (Abingdon, UK: Routledge, 2006), 110

3. Investigators from the Bigfoot Researchers Organization have either glimpsed or heard Bigfoot on twenty-seven out of thirty Bigfoot-scouting expeditions in the United States and Canada. Dr. Krantz, one of the investigators, believes that Bigfoot is a species of primate known as a *Gigantopithecus*. Therefore, Bigfoot really does exist.

Adapted from: Associated Press, “Team Heads to Michigan to Search for Bigfoot,” FOXNews.com, Jun 27, 2007, <http://www.foxnews.com/story/0,2933,286879,00.html>

4. Smaller high schools are better than larger high schools since smaller high schools have been shown to have higher graduation rates and a higher proportion of students going on to college. New York City has broken a number of large high schools up into several smaller schools.

Adapted from: David M. Herszenhorn, “Gates Charity Gives \$51 Million to City to Start 67 Schools,” New York Times, Sep 18, 2003, <http://www.nytimes.com/2003/09/18/nyregion/gates-charity-gives-51-million-to-city-to-start-67-schools.html>

5. In 1908, something flattened eight hundred square miles of forest in a part of Siberia called Tunguska. Theories abound about “the Tunguska event.” Some people say it was a UFO. Some even say it was a tiny black hole. Recently, however, scientists discovered that a lake in the area has the shape of an impact crater that would have been created by an asteroid or comet. So, the Tunguska event was caused by an asteroid or comet.

Adapted from: Paul Rincon, “Fire in the Sky: Tunguska at 100,” BBC News, Jun 30, 2008, <http://news.bbc.co.uk/2/hi/science/nature/7470283.stm>

6. There is a “generation gap” in Americans’ knowledge of politics. That is to say, older people know more about politics than younger

people. This is not the result of older people generally being more interested in politics than younger people. Opinion polls from the 1940s through the mid-1970s show that younger people used to be at least as well informed about politics as the older people of their time were.

Adapted from: Robert D. Putnam, Bowling Alone (New York: Simon & Schuster, 2000), 36

7. All cars should have a spear mounted on the steering wheel, aimed directly at the driver's chest. After all, we should do everything we can to encourage cautious driving. Since people behave much more cautiously when they know that their life is on the line, steering wheel-mounted spears would make people drive much more cautiously.

Adapted from: Steven E. Landsburg, The Armchair Economist (New York: Simon & Schuster, 1994), 5

8. Human nature is not inherently good. Human nature consists of those human traits that are spontaneous; these things cannot be learned. Thus, if something can be learned, then it is not part of human nature. Yet, goodness is not spontaneous; people must learn how to be good.

Adapted from: Xunzi, Xunzi, in Readings in Classical Chinese Philosophy, 2nd ed., edited by Philip J. Ivanhoe and Bryan W. van Norden (Indianapolis: Hackett Publishing Company, 2005), 298–99

9. It is possible for someone to wonder whether her life is meaningful even if she knows that she has enjoyed her life. This shows that a meaningful life is not the same as an enjoyable life. At the same time, someone who is alienated from her life or feels like her life is pointless, even if she is doing things that might seem worthwhile from an objective perspective, is not leading a meaningful life. This shows that a meaningful life is not the same as a life spent on objectively worthwhile projects. All of this shows that neither enjoyment nor objectively worthwhile projects, considered separately from the other, are sufficient for a meaningful life.

Adapted from: Susan Wolf, "Happiness and Meaning: Two Aspects of the Good Life," Social Philosophy & Policy 14 (1997), 211

10. Suppose that Tim learns that his grandfather had done something terrible in the 1920s, several years before the birth of Tim's mother. Suppose also that Tim has invented a time machine. While it may seem that Tim could go back in time and kill his grandfather to prevent him from doing this terrible thing, in fact, it is impossible for Tim to kill his grandfather. The past has already happened. It cannot be changed. Since Tim's grandparents had Tim's mother, who went on to have Tim, it must be the case that Tim did not kill his grandfather.

Adapted from: David Lewis, "The Paradoxes of Time Travel," American Philosophical Quarterly 13 (1976), 149–50

Need more practice? Following the steps described in the “Tips for success” section, outline the arguments from Exercise Set 1.1 in premise-and-conclusion form. Work with a friend or classmate if you want to be able to compare your work with someone else's. For even more practice, do the same thing with the arguments in the editorials, op-eds, and letters to the editor that you found on your favorite newspaper's Web site.

For a more sophisticated way to show the relationships among premises in an argument, see Appendix III: Argument Mapping (p. 262). Argument maps are especially helpful in understanding complex arguments.

Exercise Set 1.3: Analyzing visual arguments

Objective: To help you recognize short arguments in visual materials.

Instructions: Go to the companion Web site for this book. Click on the link for “Chapter I” and then on the link for “Exercise Set 1.3.” You will get a list of links to images and videos. Write a premise-and-conclusion outline of the argument that you think the image or video is trying to communicate.

Tips for success: We are constantly bombarded by visual material—from billboards to artwork to online videos—that aims to persuade us of something. Sometimes the material tries to persuade us to do something or to

want something. Sometimes it tries to persuade us to believe something. You can think of many of these materials as *visual arguments*. They don't necessarily present their premises and conclusions in words, but many of them still can be read as offering reasons in support of conclusions—that is, as arguments.

When you're thinking about a visual argument, it's entirely up to you to present the argument's ideas in a natural order. The first thing you'll need to do is determine the conclusion of the visual argument. What is the argument trying to get you to do or believe? Then you'll need to ask yourself whether the picture or video offers you reasons to believe that conclusion. If so, these will be the premises of the argument.

To identify these premises, think about what the connection is between the images that you are seeing and the conclusion that those images are meant to support. To take an extremely simple case, suppose an advertisement shows an athlete enjoying a Sprite. The conclusion of this visual argument is that you ought to drink Sprite too. What is the connection between the image of the athlete drinking Sprite and the claim that you ought to drink it? If the athlete takes a sip after a hard game or workout, perhaps the message is that Sprite is especially refreshing. In that case, the argument might be something like this: "Sprite is especially refreshing. You like refreshing drinks. Therefore, you ought to drink Sprite." Or maybe the athlete is sitting around with her friends, and they are all having a good time and drinking Sprite. In that case, the message might be that hip young adults—especially people who like this particular athlete's sport—drink Sprite and that if you want to be like these people, you should drink Sprite too.

Different people are likely to come up with different interpretations of each visual argument. In fact, you can probably come up with different interpretations of each one yourself. Don't worry about finding the one and only correct interpretation. Just focus on finding a plausible interpretation—one that the creator of the visual argument might recognize as the message he or she was trying to send.

The exercises for this exercise set, including a sample exercise, can be found on the companion Web site for this book.

Need more practice? Look through a recent magazine or a Web site that includes advertisements. Analyze the visual arguments offered in each of the advertisements that you encounter.

Critical thinking activity: Found arguments

For an out-of-class activity that gives you practice in applying Rules 1 and 2, see the “Found arguments” assignment sheet (p. 425) in Part 3.

Critical thinking activity: Creating a visual argument

For an out-of-class activity that gives you practice in dealing with visual arguments, see the “Creating a visual argument” assignment sheet (p. 427) in Part 3.

Rule 3

Start from reliable premises

No matter how well you argue from premises to conclusion, your conclusion will be weak if your premises are weak.

Nobody in the world today is really happy. Therefore, it seems that human beings are just not made for happiness. Why should we expect what we can never find?

The premise of this argument is the statement that nobody in the world today is really happy. Sometimes, on certain rainy afternoons or in certain moods, this may almost seem true. But ask yourself if this premise really is plausible. Is *nobody* in the world today really happy? Ever? At the very least, this premise needs some serious defense, and very likely it is just not true. This argument cannot show, then, that human beings are not made for happiness or that you or I should not expect to be happy.

Sometimes it is easy to start from reliable premises. You may have well-known examples at hand or reliable sources that are clearly in agreement. Other times it is harder. If you are not sure about the reliability of a premise, you may need to do some research and/or give an argument for the premise itself (see Rule 31 for more on this point). If you find you *cannot* argue adequately for your premise(s), then, of course, you need to try some other premise!

Exercise Set 1.4: Identifying reliable and unreliable premises

Objective: To give you practice recognizing reliable starting points for arguments.

Instructions: Rewrite the following arguments in premise-and-conclusion form, just as you did in Exercise Set 1.2. Then, state whether each premise is reliable and explain why or why not.

Tips for success: Arguments are both a way to convince others of something and a way to learn new things. A good argument leads you (and/or others) from premises that you already accept to conclusions that you (and/or they) did not previously accept. To do that, however, arguments need to start from premises that you or they already accept. Furthermore, when two or more people hold different views on a topic, they can't have a productive discussion unless they start from some kind of common ground. Therefore, an important part of learning to give good arguments is learning to recognize which premises are reliable and widely acceptable starting points. Deciding whether a starting point is reliable and acceptable in this way can be tricky, and can vary with the situation, but there are some rules of thumb that can guide your thinking.

First, widely accepted facts are usually reliable starting points. For instance, it's widely accepted that there is a wide variety of species on Earth and that these species resemble each other in various ways. Those facts can provide reliable starting points for an argument about evolution.

It's worth finding out how widely accepted your "facts" really are, though. Something that seems like common knowledge to you might be widely doubted in other social circles, other parts of the country, or other parts of the world. For instance, it is widely accepted in many parts of the world that the variety of species we see today evolved by natural selection, but there are also social circles and parts of the world where that is frequently denied. If you are addressing your argument to someone who denies what you regard as a widely accepted fact, you may need to find another starting point for your argument.

Second, premises that are supported by appropriate testimony or sources are usually reliable. For instance, if a trustworthy person tells you that she has been to Brazil and seen pink dolphins living in the Amazon River, you could count "There are pink dolphins living in the Amazon River" as a reliable premise.

There are also guidelines to help you spot unreliable premises. Premises that are widely known to be false or easily shown to be false are unreliable. (Again, though, remember that what's "widely known to be false" in one context may be generally accepted elsewhere. Remember your audience!) Other premises are unreliable not because we know that they're false but because we don't know, or can't know, whether they're true. Wild generalizations and overly vague claims fall into this category. So do controversial claims offered without support, and claims that we could not

possibly verify. Remember, though, that there's a difference between claiming that a premise is unreliable and claiming that it is false. Saying that a premise is unreliable could just mean that you don't know whether it's true.

Later rules in this book, especially the rules in Chapter IV about using sources, will give you further and more developed guidelines for finding reliable starting-points. Rule 31 will also invite you to offer additional reasons for seemingly unreliable premises, turning those premises into well-supported conclusions of their own arguments. But all of that is still to come. For now, just look at the premises before you, and use your common sense.

Sample

Computers will soon take over most human tasks. After all, Deep Blue, a computer, beat Garry Kasparov, the World Chess Champion, in 1997. And if computers can defeat the best human alive in an activity that symbolizes intelligence more than any other, then surely their supremacy in everything else we do is not far off.

Adapted from: Editorial, Washington Post, May 6, 1997, <http://www.washingtonpost.com/wp-srv/tech/analysis/kasparov/editorial.htm>

- (1) Deep Blue, a computer, beat the World Chess Champion in 1997.
 (2) If computers can beat the best human alive in chess, then their supremacy in everything else we do is not far off.
 Therefore, (3) Computers will soon take over most human tasks.

Premise (1) is reliable, since it is a widely accepted fact. (If the argument were intended for an audience that didn't know about Deep Blue's victory, the author would probably want to point to news reports about the match as a way of supporting the premise with sources.)

Premise (2), however, is unreliable. It is implausible speculation to say that a victory in chess suggests that "supremacy in everything else we do" is just around the corner. After all, chess is a very different kind of activity from most things that humans do. (Think of the differences between chess and writing a novel, cooking a meal, playing basketball, or navigating the social jungles of a school or office.)

This response takes a nuanced approach to premise (1), explaining that the premise is not only widely known, but easily verified in case anyone is uncertain about it (a sad day for chess fans everywhere.) The real problem, just as this response says, is with the reliability of premise (2).

Notice that the response does not attempt to say whether the conclusion is reliable. Rule 3 is about the reliability of premises. You do not need to comment on the arguments' conclusions in this exercise set.

1. Anybody could become a zombie—a relative, a friend, or even a neighbor. Zombies are constantly looking to eat the brains of the living. This is why you should always be prepared to escape from or fight back against a zombie attack.

*Adapted from: "Zombies in Plain English," YouTube, Oct 23, 2007,
<http://www.youtube.com/watch?v=bVnfyradCPY>*

2. Social networking sites have revolutionized the way we interact with our friends. Such sites allow people to stay in contact with hundreds or even thousands of people. Human nature, however, prevents us from having meaningful relationships with that many people. Therefore, most of your "friends" on those sites are not people with whom you have meaningful relationships.

*Adapted from: Robin Dunbar, "You've Got to Have (150) Friends,"
New York Times, Dec 25, 2010, <http://www.nytimes.com/2010/12/26/opinion/26dunbar.html>*

3. Radioactive materials are materials that decay into other materials. For instance, certain isotopes of carbon are radioactive; they decay into different isotopes of carbon. By looking at the ratios of radioactive materials to the products of radioactive decay in a piece of rock, we can estimate the age of the rock fairly well. This process is called "radiometric dating." Radiometric dating reveals that some large rock formations in the Earth's crust are up to four billion years old. Thus, the Earth itself is at least four billion years old.

*Adapted from: G. Brent Dalrymple, The Age of the Earth (Palo Alto:
Stanford University Press, 1994), 399*

4. There are other advanced civilizations in our galaxy. To see why this must be so, consider the following facts: There are billions of stars in our galaxy, and many of them probably have planets

around them. Some planets may develop life, and some of *those* planets will probably develop intelligent life capable of producing advanced technology.

Adapted from: "Carl Sagan on Advanced Civilizations," YouTube, Feb 24, 2008, <http://www.youtube.com/watch?v=iOPWQJkWgcM>

5. Some people scoff at a liberal education as a waste of time. But a true education is not just about accumulating knowledge. It's also about educating one's emotions. A liberal arts education exposes students not only to history, science, and math, but also to the literature and arts that speak more directly to our emotions. Thus, a liberal arts education is an essential part of any "real" education.

Adapted from: Martha Nussbaum, Not for Profit: Why Democracy Needs the Humanities (Princeton: Princeton University Press, 2010)

6. Scholars have begun looking at the colonial period as a way of understanding economic development. During the colonial period, several European powers established colonies in the Americas. Some of these colonies have become economically successful, while others have not. The most striking difference between those that succeeded and those that did not is that the successful colonies had much lower levels of economic and social inequality than the unsuccessful colonies. Therefore, we suggest that inequality hinders economic development.

Adapted from: Stanley L. Engerman and Kenneth L. Sokoloff, "Colonialism, Inequality, and Long-Run Paths of Development," in Abhijit V. Banerjee, Roland Bénabou, and Dilip Mookherjee, Understanding Poverty (New York: Oxford University Press, 2006), 37–57

7. To date, smallpox is the only disease that has been completely eliminated from the face of the Earth. We are getting closer to the day that polio is eliminated too. Polio used to be a serious problem in many parts of the world. As of 1988, polio remained endemic in only six countries: Niger, Egypt, India, Pakistan, Afghanistan, and Nigeria. By 2006, two of those countries—Niger and Egypt—were polio-free, according to the World Health Organization.

Adapted from: Mark Prendergrast, Inside the Outbreaks: The Elite Medical Detectives of the Epidemic Intelligence Service (New York: Houghton Mifflin Harcourt, 2010), 346

8. Despite what the skeptics would have you believe, many people are capable of seeing ghosts. Ghosts are real, and anyone with the psychic ability known as extrasensory perception (ESP) is capable of seeing them. ESP is a real phenomenon, according to Professor Joseph Rhine of Duke University. In fact, about half of all people have ESP, although many never realize it.

Adapted from: Hans Holzer, Ghosts: True Encounters with the World Beyond (New York: Black Dog & Leventhal Publishers, 1997), 29

9. You should be a vegetarian. Every time you eat meat, your meal is the result of the suffering and death of an animal. Besides, it's disgusting to put a piece of a dead animal's carcass into your mouth and chew it. There is plenty of great vegetarian food, including tasty meat alternatives. Also, vegetarianism is healthier than eating meat. One more reason to be a vegetarian is that you'd be joining the company of a long list of incredible people, from Leonardo da Vinci, Isaac Newton, and Thomas Edison to Paul McCartney, Shania Twain, and Tobey Maguire.

Adapted from: "Reasons to Be Vegetarian," YouTube, Jan 7, 2009, <http://www.youtube.com/watch?v=t36dufpDn9g>

10. The Bureau of Justice Statistics reports that at least three hundred thousand children in the United States are forced into prostitution and other sex-trafficking crimes every year. They estimate the average age of entry into forced prostitution is twelve years old. Forcing a child to work as a prostitute is wrong. It is a travesty that eliminating child prostitution is not a bigger priority for our country.

Adapted from: Angela Colwell, letter to the editor, Tulsa World, Apr 23, 2010, http://www.tulsaworld.com/site/opinion/article.aspx?articleid=20100423_62_A18_Acrigt552416

Need more practice? Go back to the arguments presented in Exercise Sets 1.1 and 1.2 and decide which of their premises are reliable. For even more practice, go to the Web site for this book and click on the "Chapter I" link. You'll find a link to a list of Web sites that feature online debates. Find debates that interest you and read the arguments presented in those debates. Determine which premises are reliable and why.

Rule 4: Be concrete and concise

Be concrete and concise

Avoid abstract, vague, and general terms. “We hiked for hours in the sun” is a hundred times better than “It was an extended period of laborious exertion.” Be concise too. Airy elaboration just loses everyone in a fog of words.

NO:

For those whose roles primarily involved the performance of services, as distinguished from assumption of leadership responsibilities, the main pattern seems to have been a response to the leadership’s invoking obligations that were concomitants of the status of membership in the societal community and various of its segmental units. The closest modern analogy is the military service performed by an ordinary citizen, except that the leader of the Egyptian bureaucracy did not need a special emergency to invoke legitimate obligations.³

YES:

In ancient Egypt the common people were liable to be conscripted for work.

Exercise Set 1.5: Decomplexifying artificially abstruse quotations

Objective: To help you recognize and avoid overly elaborate writing.

Instructions: Each passage in this exercise consists of a famous quote that has been rewritten using overly abstract, vague, or obscure terms. Rewrite the quote in simpler language.

Tips for success: Start by reading the passage in its entirety to get a sense for the meaning of the whole passage. Then, go back over the passage phrase by phrase, trying to figure out what each phrase means. Rewrite each phrase in the simplest language you can find, deleting words or phrases that don’t add to the meaning of the sentence. Don’t worry about coming

3. Talcott Parsons, *Societies: Evolutionary and Comparative Perspectives* (Englewood Cliffs, NJ: Prentice Hall, 1966), p. 56. The quotation and the rewritten version that follows come from Stanislas Andreski, *Social Sciences as Sorcery* (New York: St. Martin’s Press, 1972), Ch. 6.

up with the exact wording of the original quotation. Just try to express the ideas in the passage as simply and directly as possible.

Sample

Of this relatively limited extension of one of the ambulatory limbs of this particular male of the species *Homo sapiens*, it might also be possible to declare that a relatively much larger extension of the reach of the human species as a whole, so to speak, is also concurrently taking place at this point in time.

Adapted from: "Apollo 11 TV Broadcast—Neil Armstrong First Step on Moon," YouTube, Jul 20, 2009, <http://www.youtube.com/watch?v=CtwSgvstl8c>

This small step for a man is also a giant leap for humankind.

*Neil Armstrong's original statement, which he made when he first set foot on the moon, is, "That's one small step for [a] man, one giant leap for mankind." In the "complexified" form of this quotation, the first clause ("Of this relatively limited extension of one of the ambulatory limbs of this particular male of the species *Homo sapiens*") corresponds to the phrase "That's one small step for [a] man," and the rest of the quotation corresponds to "one giant leap for mankind."*

The sample response isn't exactly what Armstrong said, and that's okay. It says what Armstrong said in a clear, straightforward way. That's what matters.

1. I seem to have the distinct impression that my canine companion and I are no longer physically located within the geographical confines of the midwestern American state generally known as Kansas.

Adapted from: The Wizard of Oz, directed by Victor Fleming (Los Angeles: Metro-Goldwin-Mayer, 1939)

2. Do not inquire as to what it is that your country might accomplish on your behalf, but instead inquire what actions you might take to further the interests of the country that you regard as your own.

Adapted from: John F. Kennedy, Inaugural Address, Jan 20, 1961

3. Being able to express oneself in as concise a way as possible—that is, using the fewest, plainest words with which it is feasible to

Rule 4: Be concrete and concise

communicate the essential meaning of one's thought—is at the very core of a knack for repartee.

Adapted from: William Shakespeare, Hamlet 2.2

4. Putting aside all prevarication, my most beloved one, it would be utterly impossible for me, even with great effort, to care any less than I do at this precise moment.

Adapted from: Gone with the Wind, directed by Victor Fleming (Los Angeles: Metro-Goldwin-Mayer, 1939)

5. We must strive to exhibit in our own persons the sorts of alterations that we most fervently desire to observe in the world that we inhabit.

Adapted from: Mohandas Gandhi, quoted in John McCain & Mark Salter, Character Is Destiny (New York: Random House, 2005), 14

6. My maternal grandmother's daughter was in the frequent habit of informing me that the period between birth and death is similar to a container of cocoa-based confections.

Adapted from: Forrest Gump, directed by Robert Zemeckis (Los Angeles: Paramount Pictures, 1994)

7. Regularly turning in for the night at a fairly early hour, combined with the practice of awakening at an hour that is earlier than the hour at which most others arise, will tend to the acquisition of such desirable personal features as good physical constitution, a comfortable financial situation, and the sort of discernment and other related intellectual abilities that conduce to earning the respect of others.

Adapted from: Benjamin Franklin, Poor Richard's Almanack (1732; repr., New York: Skyhorse Publishing, 2007), 13

8. It has been my constant practice to rely upon the compassionate actions of people with whom I had not yet become acquainted prior to the performance of said action.

Adapted from: A Streetcar Named Desire, directed by Elia Kazan (Burbank, CA: Warner Bros, 1951)

9. A female member of the human species who finds herself without the company of a male of the species is akin to an aquatic, scale-covered vertebrate with gills and fins that has not the possession of a pedal-driven, two-wheeled vehicle that is powered by a rider sitting astride a frame to which the wheels are attached.

Adapted from: Gloria Steinem, quoted in Deborah G. Felder, The 100 Most Influential Women of All Time (New York: Citadel Press, 2002), 258

10. I harbor an aspiration that, at some point in the future, my four offspring, who are currently fairly young, will be assessed not according to the pigmentation of their skin but by considering the character traits that they possess.

Adapted from: Martin Luther King, Jr., speech in Washington, DC, Aug 28, 1963

Need more practice? Make a list of famous quotations, well-known song lyrics, titles of famous books, etc. Have a friend or classmate do the same. Rewrite each item on the list in the overly abstract, complex style used in this exercise. Trade “complexified” lists with your friend or classmate and try to decipher the items on his or her list. For even more practice, repeat this activity with the arguments from other exercises in this book: Rewrite each premise and conclusion in an overly complex style and challenge your classmate to figure out what the argument says.

A helpful way to be concrete and concise is to define your terms carefully. For tips on giving good definitions, see Appendix II: Definitions.

Build on substance, not overtone

Offer actual reasons; don't just play on the overtones of words.

NO:

Having so disgracefully allowed her once-proud passenger railroads to fade into obscurity, America is honor bound to restore them now!

This is supposed to be an argument for restoring (more) passenger rail service. But it offers no evidence for this conclusion whatsoever, just some emotionally loaded words—shopworn words, too, like a politician on

automatic. Did passenger rail “fade” because of something “America” did or didn’t do? What was “disgraceful” about this? Many “once-proud” institutions outlive their times, after all—we’re not obliged to restore them all. What does it mean to say America is “honor bound” to do this? Have promises been made and broken? By whom?

Much can be said for restoring passenger rail, especially in this era when the ecological and economic costs of highways are becoming enormous. The problem is that this argument does not say it. It leaves the emotional charge of the words to do all the work, and therefore really does no work at all. We’re left exactly where we started. Overtones may sometimes persuade even when they shouldn’t, of course—but remember, here we are looking for actual, concrete evidence.

Likewise, do not try to make your argument look good by using emotionally loaded words to label the other side. Generally, people advocate a position for serious and sincere reasons. Try to figure out their view—try to understand their *reasons*—even if you disagree entirely. For example, people who question a new technology are probably not in favor of “going back to the caves.” (What *are* they in favor of? Maybe you need to ask.) Likewise, a person who believes in evolution is not claiming that her grandparents were monkeys. (And again: what *does* she think?) In general, if you can’t imagine how anyone could hold the view you are attacking, probably you just don’t understand it yet.

Exercise Set 1.6: Diagnosing loaded language

Objective: To train you to recognize and avoid loaded language.

Instructions: Look for “loaded language”—that is, emotionally charged words or phrases—in each of the following arguments. If the argument contains loaded language, indicate which words or phrases are loaded and suggest a less loaded way of saying the same thing. If the passage does not contain any loaded language, say so.

Tips for success: A good argument should stand on the strength of its premises and the connection between the premises and the conclusion—not on the beauty of its rhetoric or the emotional charge of the way it’s presented. Learning to recognize loaded language helps you avoid being taken in by arguments that sound good but lack substance; it also helps you

avoid giving arguments yourself that sound good but don't actually provide good reasons for their conclusions.

Loaded language comes in both negative and positive varieties. That is, some loaded language carries negative emotional overtones. It casts an idea, a person, or whatever in a negative light. For instance, calling bankers “corporate pirates” makes them sound bad. Other loaded language carries positive emotional overtones. For instance, calling a camp for holding prisoners of war a “pacification center” makes it sound good—almost like the kind of place you’d want to go for a relaxing vacation. Look out for both kinds of loaded language.

Some loaded language is subtle. Its emotional power may depend on the context in which it is used. For instance, the term *Ivy League school* is not necessarily emotionally charged; it refers to one of a specific group of American universities. However, imagine two politicians in a debate. If one says, “Now, I may not have gone to an Ivy League school like my opponent, but . . .”, the term *Ivy League school* suddenly has an air of elitism and privilege. It can make the politician’s opponent seem out of touch with ordinary people. Look out for subtle loaded language too.

When it comes to suggesting less loaded ways of saying the same thing, look for terms that carry less—and ideally, no—emotional charge. For instance, if you’re talking about doctors who perform abortions, don’t call them “baby killers.” A phrase like that mostly just plays on our feelings. Many people think that performing abortion and killing babies are importantly different, and so they would not accept it as a neutral description. On the other hand, you shouldn’t call them “doctors who help women with medical problems” either. To people who think abortion is murder, this glosses over a tremendous moral difference between doctors who perform abortions and those who don’t. Instead, just call them “doctors who perform abortions.”

Sample

Certain irresponsible American politicians have been spewing lies about the latest attempts at reform. Whether these lies come from a combination of stupidity and a hysterical imagination or from cleverness and a willingness to exploit innocent Americans for personal political gain, these lies must be exposed for the damaging falsehoods that they are.

Adapted from: Keith Olbermann, Countdown with Keith Olbermann, MSNBC, Aug 10, 2009

This argument is full of loaded language. Calling the politicians “irresponsible” makes them sound bad without yet saying what they’re doing wrong; it could be deleted without affecting the actual substance of the argument. “Spewing lies” is an emotionally evocative way of saying “making false statements.” Speculating about whether the “lies” come from “stupidity and a hysterical imagination” or “a willingness to exploit innocent Americans” makes the politicians sound dumb, unstable, or evil, but it doesn’t actually add any facts to support the conclusion. Even worse, it falsely suggests that stupidity and malice are the only possible motives for these politicians’ statements. That whole clause can be cut, too. The argument could claim simply that some politicians are making false statements about the latest attempts at reform and that the falsehood of those statements should be made clear to the public.

This response identifies specific instances of loaded language. It explains how each instance is emotionally charged and recommends an alternative. In cases where the loaded language adds nothing substantive to the argument, this response rightly recommends that the loaded language be deleted.

Notice that in rephrasing Olbermann’s statement, this response arrives at a neutral statement that may still not be true. That is, his claim is that some politicians are making false statements about the latest attempts at reform. It remains to be seen if they are or are not; now we’d expect Olbermann to go on to offer some evidence. The point of identifying and neutralizing loaded language is simply to bring us to the point of recognizing the need for evidence in this relatively open-minded way rather than being so worked up over the alleged lie-spewing and irresponsibility that we don’t have the breathing room to even notice that no evidence has yet been offered.

1. Religious fanatics lost the battle on anti-gay discrimination in the military. This isn’t the end of their dangerous influence, though. Now that they’ve seen that their hatemongering against

homosexuals isn't going to win elections, they may just step up their fearmongering against other groups.

Adapted from: Juan Cole, "Senate Repeal of DADT in Global Context," Informed Comment, Dec 19, 2010, <http://www.juancole.com/2010/12/senate-repeal-of-dadt-in-global-context.html>

2. Of course I'm going to beat Henry Cooper! He's nothing! He's a tramp! He's a bum! I'll knock him out in five rounds—no, three!

Adapted from: "Muhammad Ali Engaging in Some of His Famous Trash Talk," YouTube, Nov 11, 2010, <http://www.youtube.com/watch?v=WsAC4lhbEOg>

3. The dirty little secret behind factory farms' profits—namely, that there's no good reason for their monstrously cruel mistreatment of animals—is getting out. Since morally decent people abhor senseless animal cruelty, people everywhere are turning against factory farms.

Adapted from: Mylan Engel, Jr., "Animal Advocates' Successes Have Factory Farmers Running Scared," Animal Ethics, Feb 6, 2007, <http://animaethics.blogspot.com/2007/02/animal-advocates-successes-have-factory.html>

4. If you are trying to lose weight, it's important that you not skip meals. If you skip meals, you're likely to experience hunger and food cravings later, making it harder for you to stick to your diet. Instead of skipping meals to control your calorie intake, eat appropriately sized meals on a regular basis.

Adapted from: Kandeel Judge, Maxine Barish-Wreden, and Karen K. Brees, The Complete Idiot's Guide to the Secrets of Longevity (New York: Penguin, 2008), 80

5. We can all agree that the defendant bought the murder weapon earlier that night. The pawn shop owner saw him buy it, and his friends saw him carrying it. So how does that switchblade end up in the old man's chest if the boy didn't kill him? Remember that imaginative little fable that the boy told? He claims that the knife fell through a hole in his pocket on his way to the movie theater. You don't really believe that, do you? The boy's a murderer, plain and simple.

Adapted from: 12 Angry Men, directed by Sidney Lumet (Los Angeles: United Artist, 1957)

6. Seriously? You're going to try to murder a sweet, gentle, leaf-eating, doe-eyed deer, and you're worried about what kind of pants you're going to wear? Imagine *you're* a deer. You're prancing around the forest. You're thirsty, so you stop at a clear, gently gurgling stream to take a nice, refreshing drink and—BAM! A bullet blows your head wide open, splattering bloodied bits of brains all over the place. Now, let me ask you: Are you going to care what kind of *pants* the jerk who shot you is wearing? No! It doesn't matter what kind of pants you wear!

Adapted from: My Cousin Vinny, directed by Jonathan Lynn (Los Angeles: Twentieth Century Fox, 1992)

7. Instead of boring you with the details of the new and innovative accomplishments that I intend to achieve while I have the honor and privilege of serving as your class president, let me just say that when you vote for me, you won't just be voting for Tracy Flick. You'll be voting to make this school a better place for you, for me, and for all of our other wonderful classmates. That's why you should vote for me as your next student body president.

Adapted from: Election, directed by Alexander Payne (Los Angeles: Paramount Pictures, 1999)

8. Some members of Congress don't want to raise the federal debt ceiling. They need to understand what that would mean for the economy. It would mean a bigger economic crisis than we saw in 2008. It would lead the U.S. government to default on its financial obligations—the first default anywhere to be caused purely by insanity.

Adapted from: "This Week with Christiane Amanpour," ABC, Jan 2, 2011, <http://abcnews.go.com/ThisWeek/week-transcript-white-house-adviser-austan-goolsbee/story?id=12522822>

For Exercises 9 and 10, find two examples of loaded language in the media, online, in conversations with friends or family, or anywhere else you can find it. Print, copy, or write down your examples. Identify the loaded words or expressions in each example, explain why they're loaded, and suggest more neutral substitutes.

Need more practice? Find online news sites that allow comments on their news stories. Look for instances of loaded language in the comments on

that site. See if you can tell which comments are expressing substantive arguments and which are just spouting emotionally loaded language. For the comments that are expressing arguments, try to find more neutral ways to say the same thing.

Use consistent terms

Short arguments normally have a single theme or thread. They carry one idea through several steps. Therefore, couch that idea in clear and carefully chosen terms, and mark each new step by using those very same terms again.

NO:

When you learn about other cultures, you start to realize the variety of human customs. This new understanding of the diversity of social practices may give you a new appreciation of other ways of life. Therefore, studying anthropology tends to make you more tolerant.

YES:

When you learn about other cultures, you start to realize the variety of human customs. When you start to realize the variety of human customs, you tend to become more tolerant. Therefore, when you learn about other cultures, you tend to become more tolerant.

The “Yes” version might not be stylish, but it *is* crystal clear, whereas the “No” version hardly seems like the same argument. One simple feature makes the difference: the “Yes” argument repeats its key terms, while the “No” version uses a new phrase for each key idea every time the idea recurs. For example, “learning about other cultures” is redescribed in the “No” version’s conclusion as “studying anthropology.” The result is that the connection between premises and conclusion is lost in the underbrush. It’s interesting underbrush, maybe, but you are still liable to get stuck in it.

Re-using the same key phrases can feel repetitive, of course, so you may be tempted to reach for your thesaurus. Don’t go there! The logic depends on clear connections between premises and between premises and conclusion. It remains essential to use a consistent term for each idea. If you are concerned about style—as sometimes you should be, of course—then go for the tightest argument, not the most flowery.

MOST CONCISE:

When you learn about other cultures, you start to realize the variety of human customs, a realization that in turn tends to make you more tolerant.

You can talk about studying anthropology and the like, if you wish, as you explain each premise in turn.

Be sure, of course, to use your terms in the same sense: it may be misleading or confusing to switch their meanings mid-stream! (See the fallacy of equivocation in Appendix I.)

CHAPTER EXERCISES

Exercise Set 1.7: Evaluating letters to the editor

Objective: To give you practice applying Rules 1–6.

Instructions: The following arguments are adapted from letters to the editor in various newspapers and magazines. State how well each argument follows each of the rules presented in this chapter.

Tips for success: For each argument, proceed through this chapter's rules systematically. Think of each rule as asking a question about the argument: Does the argument make clear what the conclusion of the argument is (Rule 1)? Does it present ideas in a natural order (Rule 2)? Are the premises reliable (Rule 3)? Could the argument be clearer or more concise (Rule 4)? If so, which words or expressions are unclear? What might the author have said instead? Does the argument use loaded language (Rule 5)? If so, which words or expressions are loaded? Can you suggest a more neutral substitute? Does the author confuse the argument by using more than one term for the same idea (Rule 6)? If so, identify the inconsistent terminology and suggest one term that the author might use throughout the argument.

Be as specific as possible in explaining the ways in which the argument does or does not follow each rule. If you think some of the premises are unreliable, say which premises those are. Explain why those premises are unreliable. If the argument is unclear or wordy, say which words or expressions could be improved. If the argument uses loaded language, say which terms are loaded and briefly explain why they're loaded. You might even

suggest a more neutral substitute. Likewise, if the author would be better off sticking to a single, consistent term for some idea, point out exactly what terms he or she uses and suggest the best one to use.

Sample

Training poor farmers in developing countries how to use organic farming practices is an effective way to fight poverty. One organization, Harambee-Kenya, has trained hundreds of farmers to use natural farming methods, such as drip irrigation using buckets. These farmers have gone from food shortages to food security and even food surpluses. Some are using the cash they earn by selling their excess agricultural output to finance their children's medical and educational expenses.

Adapted from: Carol Carper, letter to the editor, Christian Science Monitor, Jul 19, 2010, <http://www.csmonitor.com/Commentary/Letters-to-the-Editor/2010/0728/Letters-to-the-Editor-Weekly-Issue-of-July-19-2010>

This letter does a good job with Rule 1: The conclusion of the argument is clearly stated in the first sentence. The letter then presents the premises in a natural, understandable order (Rule 2). The premises are not yet known to be reliable, though (Rule 3). It would be better if the author cited a source where we could verify her claims about the success of Harambee-Kenya's program, since that is not part of most Americans' experience (and her audience consists of Americans). Most of the letter does a good job with Rule 4, although the last sentence could be simplified to something like: "Some are using the cash they earn by selling their extra food to pay for their children's medical and school fees." The letter does not use loaded language (Rule 5). It has a few problems following Rule 6: it uses "organic" in the first sentence and "natural" in the second, and it uses "fight poverty" in the first sentence but much more elaborate phrases and ideas in the last two.

Notice that this response addresses each rule. It also justifies most of its claims about how well the argument follows each rule. For example, instead of just saying, "The argument does not follow Rule 3," it explains why the premises are not reliable. Furthermore, it offers a nuanced evaluation with respect to various rules. For instance, instead of saying, "The argument does not follow Rule 4," this response acknowledges that the argument follows Rule 4 for the most part, but points out a specific sentence that could be more concrete and concise.

1. Outlaw drug dealers don't check to see how old their customers are. They don't care. Licensed dealers would check to make sure that buyers weren't underage. If marijuana were legalized, it would be sold mainly by licensed dealers. Thus, legalizing marijuana would actually make it harder for teenagers to get drugs.

Adapted from: Ralph Givens, letter to the editor, Christian Science Monitor, Oct 18, 2010, <http://www.csmonitor.com/Commentary/Letters-to-the-Editor/2010/1018/Letters-to-the-Editor-Weekly-Issue-of-October-18-2010>

2. The conquest of England by French-speaking Normans in 1066 completely transformed the English language. Consider *Beowulf*, written before the conquest, and Chaucer's *The Canterbury Tales*, written a few centuries after the conquest. Well-educated modern English speakers could understand *The Canterbury Tales* without too much difficulty, but they probably couldn't understand a single line of *Beowulf*, which was written in Old English.

Adapted from: Robert Hellam, letter to the editor, The Economist, Jun 10, 2010

3. Politicians today are in love with 30-second sound bites. They run screaming from anything requiring thoughtful, intelligent, or honest discussion. We ought to be ashamed of the level of discourse in our politics. Instead of actual debate, we get nothing but innuendo and idiocy.

Adapted from: Margot LeRoy, letter to the editor, USA Today, Oct 31, 2010

4. Science, technology, engineering, and math education in the United States is in a crisis. Incorporating engineering into the curriculum can improve learning outcomes in technical fields: Engineering makes abstract lessons about science and math more engaging. Including engineering activities also helps improve students' imaginations.

Adapted from: Thomas Loughlin, letter to the editor, New York Times, Oct 29, 2010, <http://www.nytimes.com/2010/10/29/opinion/129science.html>

5. It usually takes at least 25 years for important scientific discoveries to translate into big changes in health care. This was the case

for vaccinations, antibiotics, open-heart surgery, chemotherapy, and organ transplants. Thus, it's no surprise that the Human Genome Project, which cataloged human DNA, did not immediately result in the incredible medical advances predicted by a few overly enthusiastic scientists.

Adapted from: Leon E. Rosenberg and Huntington F. Willard, letter to the editor, New York Times, Jun 25, 2010, <http://www.nytimes.com/2010/06/26/opinion/lweb26genome.html>

6. Media coverage about youth suicides usually misses the point when it comes to the real cause of suicide. The media emphasizes stress; cold, dark winters; and academic or social challenges. But most people who face those problems don't kill themselves. The real cause of suicide is mental illness. That's what makes the difference between the people who respond to those stresses by attempting suicide and those who don't. To prevent suicide, society needs to provide better access to mental health services and reduce the stigma around the use of those services. Young people are our future. When we fail to maximize their success, let alone their chances of survival, we fail ourselves and our country.

Adapted from: Maria A. Oquendo, letter to the editor, New York Times, Mar 25, 2010, <http://query.nytimes.com/gst/fullpage.html?res=9B0DE1DF1E3AF936A15750C0A9669D8B63>

7. Fight for your local library! Local libraries provide the public with free, equitable access to information. When you need a book for your child's school report or want to learn how to plant a garden, train a pet, or repair a dryer, the library has the information you need—and librarians to help you find it. Furthermore, libraries encourage people to read and learn for pleasure. There are limits to what you can get on the Internet.

Adapted from: Regina Powers, letter to the editor, Los Angeles Times, Nov 17, 2010, <http://articles.latimes.com/2010/nov/17/opinion/la-le-1117-wednesday-20101117>

8. Western countries claim to value justice, democracy, and egalitarianism. Yet, the United Nations Security Council's permanent

members—Britain, the United States, Russia, China, and France—have a veto over any matter before the Council. This gives each of those countries the power to overrule international consensus on important matters. That is neither just, democratic, nor egalitarian. It is only right, then, that the Security Council be reformed so that no country holds veto power.

Adapted from: Paul Khurana, letter to the editor, The Economist, Dec 2, 2010, <http://www.economist.com/node/17627530>

9. A misplaced emphasis on sports in schools is a disservice to the young students who spend more time on athletics than academics. Some schools have an out-of-control sports culture. Many school administrators and coaches blatantly disregard academic eligibility requirements in order to put star athletes on the field. For the good of the students themselves, school administrators need to take academic eligibility requirements seriously.

Adapted from: Richard Whitmire, letter to the editor, Washington Post, Dec 3, 2010, <http://www.washingtonpost.com/wp-dyn/content/article/2010/12/03/AR2010120305599.html>

10. Some people insist that there are no well-documented instances of genuine UFO sightings or alien encounters. What these people overlook is the fact that publications that document such sightings and encounters are routinely suppressed by mainstream society. In Manhattan, the vast majority of bookstores and magazine stands refuse to stock the books and periodicals that detail sightings and encounters. Those books and periodicals are not cataloged in any of the standard reference sources. If people dig deep enough, though, they will find that publications like *UFO*, *UFO Universe*, *Fortean Times*, and *Perceptions* do document genuine UFO sightings and alien encounters.

Adapted from: Brian Camp, letter to the editor, New York Times, Sep 1, 1996, <http://www.nytimes.com/1996/09/01/opinion/l-teaching-science-139459.html>

Need more practice? Working with a friend or classmate, find the letters to the editor in your favorite magazine or newspaper. For each letter, decide whether the letter contains an argument. If so, evaluate how well the letter follows the rules from this chapter. Then, compare your evaluation

with your friend's or classmate's. If you disagree about how well a letter follows any of the rules, see if you can come to an agreement by explaining how the letter does or does not follow the rule.

Critical thinking activity: Writing a letter to the editor

For an out-of-class activity that gives you practice in constructing arguments of your own, see the "Writing a letter to the editor" assignment sheet (p. 426) in Part 3.