

### Some Tips on Definitions

So far, we've seen that definitions serve a variety of purposes and take several different forms. Combinations can be of many sorts: a definition by synonym that is precisising ("minor" means under eighteen); an analytical definition designed just to persuade (a liberal is somebody who wants the able and willing to take care of both the unable and the unwilling). But what makes a definition a good one?

First, definitions should not prejudice the case against one side of a debate or the other. This is one form of *begging the question*, which will be discussed in some detail in Chapter 7. For now, just recall that one cannot usually win a debate simply by insisting on one's own favored definition of key terms, since those who disagree with your position will also disagree with your definitions. Definitions are instances in which people have to try to achieve a kind of neutral ground.

Second, definitions should be clear. They are designed to clear the air, not muddy the water. This means they should be expressed in language that is as clear and simple as the subject will allow. If we define a word in language that is more obscure than the original word, we accomplish nothing. This includes avoiding emotively charged language whenever possible.

Realize that sometimes you must get along with incomplete definitions. In real life, we sometimes have to deal with claims that include such big-league abstractions as friendship, loyalty, fair play, freedom, rights, and so forth. If you have to give a *complete* definition of "freedom" or "fair play," you'd best not plan on getting home early. Such concepts have subtle and complex parameters that might take a lifetime to pin down. For practical purposes, what is usually needed for words like these is not a complete definition but a precisising definition that focuses on one aspect of the concept and provides sufficient guidance

### In Depth

#### Are We Innately Selfish?

You sometimes hear beginning students in philosophy maintaining that every voluntary action is a selfish one, done only to benefit oneself. This is a striking idea, and the student typically is quite impressed by the finding. The argument for the idea normally proceeds something like this: All voluntary acts are done to satisfy one's own desire to do them; thus, all voluntary acts are done for self-benefit; thus, all voluntary acts are selfish acts.\*

The problem, if it isn't obvious, is that this argument does not make use of our ordinary notion of selfishness. Ordinarily, if we're told that someone is a selfish person, we think we've learned something important about them, not simply that they perform voluntary actions. This indicates that the argument above makes use of a new and different meaning for "selfish." If we had only the new meaning for the word, we'd probably stop using it, since it conveys nothing interesting about a person.

The key to spotting mistakes like this is to have a clear definition of key terms and to keep it in mind throughout the discussion.

\*A diagram for this simple argument is provided in the answer section, p. 509.

for the purposes at hand: "To me, the word 'justice' does not include referring to a person's private life when evaluating his or her work performance."

The following exercise will give you practice with definitions.

### Exercise 3-3

In groups (or individually if your instructor prefers), determine what term in each of the following is being defined and whether the definition is by example or by synonym or an analytical definition. If it is difficult to tell which kind of definition is present, describe the difficulty.

- ▲ 1. A piano is a stringed instrument in which felt hammers are made to strike the strings by an arrangement of keys and levers.
2. "Decaffeinated" means without caffeine.
3. Steve Martin is my idea of a successful philosophy major.
- ▲ 4. The red planet is Mars.
5. "UV" refers to ultraviolet light.
6. The Cheyenne perfectly illustrate the sort of Native Americans who were Plains Indians.
7. Data, in our case, is raw information collected from survey forms, which is then put in tabular form and analyzed.
- ▲ 8. "Chiaroscuro" is just a fancy word for shading.
9. Bifocals are glasses with two different prescriptions ground into each lens, making it possible to focus at two different distances from the wearer.
10. Red is the color that we perceive when our eyes are struck by light waves of approximately seven angstroms.
- ▲ 11. A significant other can be taken to be a person's spouse, lover, long-term companion, or just girlfriend or boyfriend.
12. "Assessment" means evaluation.
13. A blackout is "a period of total memory loss, as one induced by an accident or prolonged alcoholic drinking." When your buddies tell you they loved your rendition of the Lambada on Madison's pool table the other night and you don't even remember being at Madison's, that is a blackout.  
—Adapted from the *CalPoly*, San Luis Obispo, Mustang Daily
14. A pearl, which is the only animal-produced gem, begins as an irritant inside an oyster. The oyster then secretes a coating of nacre around the irritating object. The result is a pearl, the size of which is determined by the number of layers with which the oyster coats the object.
15. According to my cousin, who lives in Tulsa, the phrase "bored person" refers to anybody who is between the ages of sixteen and twenty-five and lives in eastern Oklahoma.

### WRITING ARGUMENTATIVE ESSAYS

Recently, the Educational Testing Service revamped the infamous Scholastic Aptitude Test (SAT), which many universities use when determining whether to admit an applicant. The most significant change was to have test takers

write an argumentative essay. This change in the SAT shows the importance the educators place on the ability to write this type of essay. That's because writing an argumentative essay is doing nothing other than thinking critically—and leaving a paper trail for others to follow. This isn't a book on writing, but writing an argumentative essay is so closely related to thinking critically that we would like to take the opportunity to offer our recommendations. We know professors who have retired because they could not bear to read another student essay. As a result, we offer our two bits' worth here in hopes of continuing to see familiar faces.

As we said back on p. 71, an argumentative essay generally has four components:

1. A statement of the issue
2. A statement of one's position on that issue
3. Arguments that support one's position
4. Rebuttals of arguments that support contrary positions

Ideally, your essay should begin with an introduction to the issue that demonstrates that the issue is important or interesting. This is not always easy, but even when you are not excited about the subject yourself, it is still good practice to try to make your reader interested. Your statement of the issue should be fair; that is, don't try to state the issue in such a way that your position on it is obviously the only correct one. This can make your reader suspicious; the burden of convincing him or her will come later, when you give your arguments.

Your position on the issue should be clear. Try to be brief. If you have stated the issue clearly, it should be a simple matter to identify your position.

Your arguments in support of your position also should be as succinct as you can make them, but it is much more important to be clear than to be brief. After all, this is the heart of your essay. The reasons you cite should be clearly relevant, and they should be either clearly reliable or backed up by further arguments. Much of the rest of this book is devoted to how this is done; hang in there.

If there are well-known arguments for the other side of the issue, you should acknowledge them and offer some reason to believe that they are unconvincing. You can do this either by attacking the premises that are commonly given or by trying to show that those premises do not actually support the opposing conclusion. More on these topics later, too.

Following are some more detailed hints that might be helpful in planning and writing your argumentative essay.

1. **Focus.** Make clear at the outset what issue you intend to address and what your position on the issue will be. However, nothing is quite so boring as starting off with the words "In this essay, I shall argue that X, Y, and Z," and then going on to itemize everything you are about to say, and at the end concluding with the words "In this essay, I argued that X, Y, and Z." As a matter of style, you should let the reader know what to expect without using trite phrases and without going on at length. However, you should try to find

an engaging way to state your position. For example, instead of "In this essay, I shall discuss the rights of animals to inherit property from their masters," you might begin, "Could your inheritance wind up belonging to your mother's cat?"

2. **Stick to the issue.** All points you make in an essay should be connected to the issue under discussion and should always either (a) support, illustrate, explain, clarify, elaborate on, or emphasize your position on the issue, or (b) serve as responses to anticipated objections. Rid the essay of irrelevancies and dangling thoughts.

3. **Arrange the components of the essay in a logical sequence.** This is just common sense. Make a point before you clarify it, for example, not the other way around.

When supporting your points, bring in examples, clarification, and the like in such a way that a reader knows what in the world you are doing. A reader should be able to discern the relationship between any given sentence and your ultimate objective, and he or she should be able to move from sentence to sentence and from paragraph to paragraph without getting lost or confused. If a reader cannot outline your essay with ease, you have not properly sequenced your material. Your essay might be fine as a piece of French philosophy, but it would not pass as an argumentative essay.

4. **Be complete.** Accomplish what you set out to accomplish, support your position adequately, and anticipate and respond to possible objections. Keep in mind that many issues are too large to be treated exhaustively in a single essay. The key to being complete is to define the issue sharply enough that you can be complete. Thus, the more limited your topic, the easier it is to be complete in covering it.

Also, be sure there is closure at every level. Sentences should be complete, paragraphs should be unified as wholes (and usually each should stick to a single point), and the essay should reach a conclusion. Incidentally, reaching a conclusion and summarizing are not the same thing. Short essays do not require summaries.

### Good Writing Practices

Understanding the four principles just mentioned is one thing, but actually employing them may be more difficult. Fortunately, there are five practices that a writer can follow to improve the organization of an essay and to help avoid other problems. We offer the following merely as a set of recommendations within the broader scope of thinking critically in writing.

1. At some stage *after* the first draft, outline what you have written. Then, make certain the outline is logical and that every sentence in the essay fits into the outline as it should. Some writers create an informal outline before they begin, but many do not. Our advice: Just identify the issue and your position on it, and start writing by stating them both.
2. Revise your work. Revising is the secret to good writing. Even major-league writers revise what they write, and they revise continuously. Unless you are more gifted than the very best professional writers, revise,

I'm for abolishing and doing away with redundancy.

—J. CURTIS MCKAY, of the Wisconsin State Elections Board (reported by Ross and Petras)

We ourselves are also for that too.

revise, revise. Don't think in terms of two or three drafts. Think in terms of innumerable drafts.

3. Have someone else read your essay and offer criticisms of it. Revise as required.
4. If you have trouble with grammar or punctuation, reading your essay out loud may help you detect problems your eyes have missed.
5. After you are completely satisfied with the essay, put it aside. Then, come back to it later for still further revisions.

### Essay Types to Avoid

Seasoned instructors know that the first batch of essays they get from a class will include samples of each of the following types. We recommend avoiding these mistakes:

- **The Windy Preamble.** Writers of this type of essay avoid getting to the issue and instead go on at length with introductory remarks, often about how important the issue is, how it has troubled thinkers for centuries, how opinions on the issue are many and various, and so on, and so on. Anything you write that smacks of "When in the course of human events . . ." should go into the trash can immediately.

### On Language

#### And While We're on the Subject of Writing

Don't forget these rules of good style:

1. Avoid clichés like the plague.
2. Be more or less specific.
3. NEVER generalize.
4. The passive voice is to be ignored.
5. Never, ever be redundant.
6. Exaggeration is a billion times worse than understatement.
7. Make sure verbs agrees with their subjects.
8. Why use rhetorical questions?
9. Parenthetical remarks (however relevant) are (usually) unnecessary.
10. Proofread carefully to see if you any words out.
11. And it's usually a bad idea to start a sentence with a conjunction.

This list has been making the rounds on the Internet.

- **The Stream-of-Consciousness Ramble.** This type of essay results when writers make no attempt to organize their thoughts and simply spew them out in the order in which they come to mind.
- **The Knee-Jerk Reaction.** In this type of essay, writers record their first reaction to an issue without considering the issue in any depth or detail. It always shows.
- **The Glancing Blow.** In this type of essay, writers address an issue obliquely. If they are supposed to evaluate the health benefits of bicycling, they will bury the topic in an essay on the history of cycling; if they are supposed to address the history of cycling, they will talk about the benefits of riding bicycles throughout history.
- **Let the Reader Do the Work.** Writers of this type of essay expect the reader to follow them through non sequiturs, abrupt shifts in direction, and irrelevant sidetracks.

### Persuasive Writing

The primary aim of argumentation and the argumentative essay is to support a position on an issue. Good writers, however, write for an audience and hope their audience will find what they write persuasive. If you are writing for an audience of people who think critically, it is helpful to adhere to these principles:

1. Confine your discussion of an opponent's point of view to issues rather than personal considerations.
2. When rebutting an opposing viewpoint, avoid being strident or insulting. Don't call opposing arguments absurd or ridiculous.
3. If an opponent's argument is good, concede that it is good.
4. If space or time is limited, be sure to concentrate on the most important considerations. Don't become obsessive about refuting every last criticism of your position.
5. Present your strongest arguments first.

There is nothing wrong with trying to make a persuasive case for your position. However, in this book, we place more emphasis on making and recognizing good arguments than on simply devising effective techniques of persuasion. Some people can be persuaded by poor arguments and doubtful claims, and an argumentative essay can be effective as a piece of propaganda even when it is a rational and critical failure. One of the most difficult things you are called upon to do as a critical thinker is to construct and evaluate claims and arguments independently of their power to win a following. The remainder of this book—after a section on writing and diversity—is devoted to this task.

### Writing in a Diverse Society

In closing, it seems appropriate to mention how important it is to avoid writing in a manner that reinforces questionable assumptions and attitudes about people's gender, ethnic background, religion, sexual orientation, physical,

ability or disability, or other characteristics. This isn't just a matter of ethics; it is a matter of clarity and good sense. Careless word choices relative to such characteristics not only are imprecise and inaccurate but also may be viewed as biased even if they were not intended to be, and thus they may diminish the writer's credibility. Worse, using sexist or racist language may distort the writer's own perspective and keep him or her from viewing social issues clearly and objectively.

"Always" and "never" are two words you should always remember never to use.

—WENDELL JOHNSON

Another tip on writing.

What day is the day after three days before the day after tomorrow?

Complicated, but neither vague nor ambiguous.

But language isn't entirely *not* a matter of ethics, either. We are a society that aspires to be just, a society that strives not to withhold its benefits from individuals on the basis of their ethnic or racial background, skin color, religion, gender, or disability. As a people, we try to end practices and change or remove institutions that are unjustly discriminatory. Some of these unfair practices and institutions are, unfortunately, embedded in our language.

Some common ways of speaking and writing, for example, assume that "normal" people are all white males. It is still not uncommon, for instance, to mention a person's race, gender, or ethnic background if the person is *not* a white male, and *not* to do so if the person *is*. Of course, it may be relevant to whatever you are writing about to state that this particular individual is a male of Irish descent, or whatever; if so, there is absolutely nothing wrong with saying so.

Some language practices are particularly unfair to women. Imagine a conversation among three people, you being one of them. Imagine that the other two talk only to each other. When you speak, they listen politely; but when you are finished, they continue as though you had never spoken. Even though what you say is true and relevant to the discussion, the other two proceed as though you were invisible. Because you are not being taken seriously, you are at a considerable disadvantage. You have reason to be unhappy.

In an analogous way, women have been far less visible in language than men and have thus been at a disadvantage. Another word for the human race is not "woman," but "man" or "mankind." The generic human has often been referred to as "he." How do you run a project? You *man* it. Who supervises the department or runs the meeting? The *chairman*. Who heads the crew? The *foreman*. Picture a research scientist to yourself. Got the picture? Is it a picture of a *woman*? No? That's because the standard picture, or stereotype, of a research scientist is a picture of a man. Or, read this sentence: "Research scientists often put their work before their personal lives and neglect their husbands." Were you surprised by the last word? Again, the stereotypical picture of a research scientist is a picture of a man.

A careful and precise writer finds little need to converse in the lazy language of stereotypes, especially those that perpetuate prejudice. As long as the idea prevails that the "normal" research scientist is a man, women who are or who wish to become research scientists will tend to be thought of as out of place. So they must carry an *extra* burden, the burden of showing that they are *not* out of place. That's unfair. If you unthinkingly always write, "The research scientist . . . he," you are perpetuating an image that places women at a disadvantage. Some research scientists are men, and some are women. If you wish to make a claim about male research scientists, do so. But if you wish to make a claim about research scientists in general, don't write as though they were all males.

The rule to follow in all cases is this: Keep your writing free of *irrelevant implied evaluation* of gender, race, ethnic background, religion, or any other human attribute.

This list summarizes the topics covered in this chapter:

## Recap

- Clarity of language is extremely important to the ability to think critically.
- Clarity of language can often be lost as a result of multiple causes, including, importantly, vagueness, ambiguity, and generality.
- Vagueness is a matter of degree; what matters is not being too vague for the purposes at hand.
- A statement is ambiguous when it is subject to more than one interpretation and it isn't clear which interpretation is the correct one.
- Some main types of ambiguity are semantic ambiguity, syntactic ambiguity, grouping ambiguity, and ambiguous pronoun reference.
- A claim is overly general when it lacks sufficient detail to restrict its application to the immediate subject.
- To reduce vagueness or eliminate ambiguity, or when new or unfamiliar words are brought into play, or familiar words are used in an unusual way, definitions are our best tool.
- The most common types of definitions are definition by synonym, definition by example, and analytical definition.
- Some "definitions" are intended not to clarify meaning but to express or influence attitude. These are known as rhetorical definitions.
- Rhetorical definitions accomplish their ends by means of the rhetorical force (emotive meaning) of terms.
- Critical thinking done on paper is known as an argumentative essay, a type of writing worth mastering, perhaps by following our suggestions.

## Exercise 3-4

Are the italicized words or phrases in each of the following too imprecise given the implied context? Explain.

- ▲ 1. Please cook this steak *longer*. It's too rare.
- 2. If you get ready for bed quickly, Mommy has a *surprise* for you.
- 3. This program contains language that some viewers may find offensive. It is recommended for *mature* audiences only.
- ▲ 4. *Turn down the damned noise!* Some people around here want to sleep!

## Additional Exercises

- ▲ 10. *Hundreds of people* have ridden in that taxi.
- 11. *All our cars* are on sale for two hundred dollars over factory invoice.
- ▲ 12. *Chicagoans* drink more beer than *New Yorkers*.
- 13. *Power lawn mowers* produce more pollution than *motorcycles*.
- 14. *The Baltimore Orioles* may make it to the World Series in another six or seven years.
- ▲ 15. *People* are getting older.

### Exercise 3-9

From your reading of this chapter, it should be fairly easy to identify the two kinds of mistakes present in the following ten examples. Identify which of the mistakes is present in each.

1. Irish wolfhounds are becoming increasingly popular these days. My dog is an Irish wolfhound. Therefore, my dog is becoming increasingly popular these days.
2. Humans are made of atoms and molecules. But neither atoms nor molecules are visible to the unaided eye. Therefore, humans should not be visible to the naked eye.
3. Salmon are disappearing from this river. Hey! There's a salmon now! Let's watch and see if it disappears!
4. During the nineteenth century, the English ruled the world. Harold Bingham was a nineteenth-century Englishman. Therefore, during the nineteenth century, Harold Bingham ruled the world.
5. A Humvee uses much more gasoline than a Honda automobile. So, clearly, more of the gasoline pumped these days is used by Humvees than by Hondas.
6. Humans give live birth to their children. Arnold Schwarzenegger is a human. Therefore, Arnold Schwarzenegger gives live birth to his children.
7. Every actor in the movie, as well as the director and the screenwriter, is Oscar-winner quality. So, the movie is surely Oscar-winner quality.
8. Sodium is dangerous if ingested in even modest quantities. The same is true of chloride. So, a combination of sodium and chloride will surely be very dangerous if ingested.
9. Students at the University of South Carolina consume more than 1,000 kilos of grits every semester. Susan is a student at South Carolina. Hard to see how anyone could eat that much of anything, but I guess she does.
10. If people are thrifty and save a large percentage of their money, then their personal economy is better off in the long run. Therefore, if a society is thrifty and saves a large percentage of its money, the society will be better off in the long run.

### Exercise 3-10



"How's everything?"

What is the ambiguity behind the joke?

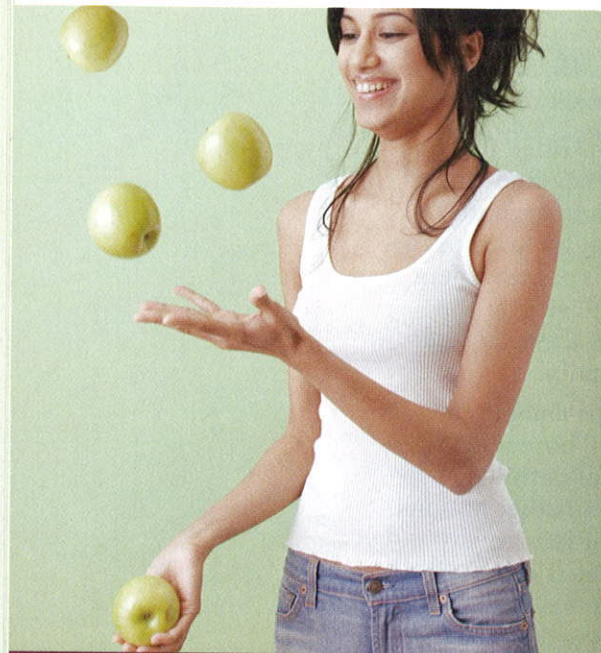
### Exercise 3-11

Determine which of the following definitions are more likely designed to persuade and which are not.

1. Punk is musical freedom. It's saying, doing and playing what you want. In Webster's terms, 'nirvana' means freedom from pain, suffering and the external world, and that's pretty close to my definition of Punk Rock.  
—Kurt Cobain
2. Congress's definition of torture . . . [is] the infliction of severe mental or physical pain.  
—John Yoo
3. Democrats' definition of "rich"—always seems to be set just above whatever the salary happens to be for a member of Congress. Perhaps that says it all.  
—Steve Steckler
4. That is the definition of faith—acceptance of that which we imagine to be true, that which we cannot prove.  
—Dan Brown
5. Sin: That's anything that's so much fun it's difficult not to do it.  
—Dave Kilbourne

### Exercise 3-12

Make up six definitions, two of which are designed to make the thing defined look good, two of which are designed to make it look bad, and two of which are neutral.



# 4

## Students will learn to . . .

1. Evaluate degrees of credibility
2. Assess whether a source is an interested versus a disinterested party
3. Assess claims in relation to their own observations, experiences, or background information
4. Evaluate a source based on veracity, objectivity, and accuracy
5. Evaluate a source based on knowledge or expertise
6. Understand the influences and biases behind the news
7. Become better (and perhaps more skeptical) evaluators of media messages
8. Limit the influence of advertising on their consumer behavior

**R**aymond James Merrill was the brother of an acquaintance of one of your authors. In his mid-fifties, Merrill still cut a striking figure—tall and lean, with chiseled features, a bushy mustache, and a mane of blond hair. But he had been in a funk. He had broken up with his girlfriend, and he did not want to be alone. Then a website that featured “Latin singles” led him to Regina Rachid, an attractive woman with a seductive smile who lived in San Jose dos Campos, a city in southern Brazil, and suddenly Merrill was in love. Desperately so, it seems. He believed everything Rachid told him and was credulous enough to make three trips to Brazil to be with her, to give her thousands of dollars in cash, and to buy her a \$20,000 automobile. He even refused to blame her when thousands of dollars in unexplained charges turned up on his credit card account. Sadly, Rachid was more interested in Merrill’s money than in his affection, and when he went to Brazil the third time, to get married and, he believed, begin a new life, he disappeared. The story ended tragically: Merrill’s strangled and burned body was found in an isolated spot several miles out of town. Rachid and two accomplices are now in jail for the crime, and two accessories are under investigation

as we write this.\* The moral of the story: It can be a horrible mistake to let our needs and desires overwhelm our critical abilities when we are not sure with whom or with what we’re dealing. Our focus in this chapter is on how to determine when a claim or a source of a claim is credible enough to warrant belief.

A second story, less dramatic but much more common, is about a friend of ours named Dave, who not long ago received an email from Citibank. It notified him that there might be a problem with his credit card account and asked him to visit the bank’s website to straighten things out. (These notices often include a threat that if you fail to respond, your account may be closed.) A link was provided to the website. When he visited the site, he was asked to confirm details of his personal information, including account numbers, Social Security number, and his mother’s maiden name. The website looked exactly like the Citibank website he had visited before, with the bank’s logo and other authentic-appearing details. But very shortly after this episode, he discovered that his card had paid for a plasma television, a home theater set, and a couple of expensive car stereos, none of which he had ordered or received.

Dave was a victim of “phishing,” a ploy to identify victims for identity theft and credit card fraud. As this edition goes to press, the number of phishing

## Real Life

### The Nigerian Advance Fee 4-1-9 Fraud: The Internet’s Longest-Running Scam Is Still Running Strong

If you have an email account, chances are you’ve received an offer from someone in Nigeria, probably claiming to be a Nigerian civil servant, who is looking for someone just like you who has a bank account to which several millions of dollars can be sent—money that results from “overinvoicing” or “double invoicing” oil purchases or otherwise needs laundering outside the country. You will receive a generous percentage of the money for your assistance, but you will have to help a bit at the outset by sending some amount of money to facilitate the transactions, or to show *your* good faith!

This scam, sometimes called “4-1-9 Fraud,” after the relevant section of Nigeria’s criminal code, is now celebrating more than a quarter century of existence. (It operated by telephone and FAX before the web was up and running.) Its variations are creative and numerous. Critical thinkers immediately recognize the failure of credibility such offers have, but thousands of people have not, and from a lack of critical thinking skills or from simple greed, hundreds of millions of dollars have been lost to the perpetrators of this fraud.

To read more about this scam, check out these websites: <<http://www.secretservice.gov/alert419.shtml>> and <<http://home.rica.net/alphae/419coal/>>.

\*The whole story can be found at [www.justice4raymond.org](http://www.justice4raymond.org).

scams continues to rise, with millions of people receiving phony emails alleging to be from eBay, PayPal, and other Internet companies as well as an assortment of banks and credit card companies. Some of these phishing expeditions threaten to suspend or close the individual's account if no response is made. Needless to say, a person should give *no credibility* to an email that purports to be from a bank or other company and asks for personal identifying information via email or a website.

There are two grounds for suspicion in cases where credibility is the issue. The first ground is the claim itself. Dave should have asked himself just how likely it is that Citibank would notify him of a problem with his account by email and would ask him for his personal, identifying information. (Hint: No bank will approach its customers for such information by email or telephone.) The second ground for suspicion is the source of the claim. In this case, Dave believed the source was legitimate. But here's the point, one that critical thinkers are well aware of these days: *On the Internet, whether by website or email, the average person has no idea where the stuff on the computer screen comes from.* Computer experts have methods that can sometimes identify the source of an email, but most of us are very easy to mislead.

Dave is no dummy; being fooled by such scams is not a sign of a lack of intelligence. His concern that his account might be suspended caused him to overlook the ominous possibility that the original request might be a fake. In other cases, such as the one described in the "4-1-9 Fraud" box, it may be wishful thinking or a touch of simple greed that causes a person to lower his or her credibility guard.

Every time we revise and update this book, we feel obliged to make our warnings about Internet fraud more severe. And every year we seem to be borne out by events. The level of theft, fraud, duplicity, and plain old vandalism seems to rise like a constant tide. We'll have some suggestions for keeping yourself, your records, and your money safe later in the chapter. For now, just remember that you need your critical thinking lights on whenever you open your browser.

### THE CLAIM AND ITS SOURCE

As indicated in the phishing story, there are two arenas in which we assess credibility: the first is that of *claims* themselves; the second is the *claims' sources*. If we're told that ducks can communicate by quacking in Morse code, we dismiss the claim immediately. Such claims lack credibility no matter where they come from. (They have no initial plausibility, a notion that will be explained later.) But the claim that ducks mate for life is not at all outrageous; it might be true: it's a credible claim. Whether we should believe it depends on its source; if we read it in a bird book or hear it from a bird expert, we are much more likely to believe it than if we hear it from our editor, for example.

There are degrees of credibility and incredibility; they are not all-or-nothing kinds of things, whether we're talking about claims or sources. Consider the claim that the president of the United States has been hypnotized and is acting completely under the spell of wizards who are hiding in warehouses in suburban Washington, D.C. This truly requires a stretch of the imagination; it is very unlikely. But, however unlikely, it is still more credible than the claim that the president is not human at all but a robot constructed and controlled by aliens from another galaxy. Sources (i.e., people) vary in their credibility

just as do the claims they offer. If the next-door neighbor you've always liked is arrested for bank robbery, his denials will probably seem credible to you. But he loses credibility if it turns out he owns a silencer and a .45 automatic with the serial numbers removed. Similarly, a knowledgeable friend who tells us about an investment opportunity has a bit more credibility if we learn he has invested his own money in the idea. (At least we could be assured he believed the information himself.) On the other hand, he has less credibility if we learn he will make a substantial commission from our investment in it.

So, there are always two questions to be asked about a claim with which we're presented. First, when does a *claim itself* lack credibility—that is, when does its *content* present a credibility problem? Second, when does the *source* of a claim lack credibility?

We'll turn next to the first of these questions, which deals with what a claim actually says. The general answer is:

A claim lacks inherent credibility to the extent that it conflicts with what we have observed or what we think we know—our background information—or with other credible claims.

## In the Media

### Guaranteeing an Interested Party, or the Fox Audits the Henhouse

In 2005, an audit program was established by the federal government to root out fraud and waste in the Medicare program. An Atlanta-based auditing firm, PRG-Schultz, was given the job of reviewing Medicare records and searching for mistakes and overcharges in three states. So far, so good.

But the way the program was set up, the auditors were paid only when they found such mistakes and overcharges—they kept a commission of 25 to 30 cents for every dollar determined to be in error. Naturally, this makes the firm a very interested party, since the more fraud and waste it finds, the more money it makes.

As a critical thinker might expect, PRG-Schultz found lots of fraud and waste; they had rejected more than \$105 million in Medicare claims by September 2006 and millions more by the time the program came under review by an administrative law judge. As a critical thinker might expect, many of the rejected charges were reversed on appeal; they were found to be legitimate after all.

Remember, putting an interested party in charge of making decisions is an invitation to error—or worse. That's why the expression "Don't put the fox in charge of the henhouse" is an important warning.

P.S. Because of the way the law was originally implemented, PRG-Schultz will be allowed to keep the money it received in commissions even though its decisions in many cases were reversed. The fox got away with this one.

Seattle Times online (seattletimes.nwsources.com), May 19, 2007, and the Sacramento Bee, September 16, 2007.

Just what this answer means will be explained in the section that follows. After that, we'll turn our attention to the second question we asked earlier, about the credibility of sources.

### ASSESSING THE CONTENT OF THE CLAIM

So, some claims stand up on their own; they tend to be acceptable regardless of from whom we hear them. But when they fail on their own, as we've said, it's because they come into conflict either with our own observations or with what we call our "background knowledge." We'll discuss each of these in turn.

#### Does the Claim Conflict with Our Personal Observations?

Our own observations provide our most reliable source of information about the world. It is therefore only reasonable to be suspicious of any claim that comes into conflict with what we've observed. Imagine that Moore has just come from the home of Mr. Marquis, a mutual friend of his and Parker's, and has seen his new red Mini Cooper automobile. He meets Parker, who tells him, "I heard that Marquis has bought a new Mini Cooper, a bright blue one." Moore does not need critical thinking training to reject Parker's claim about the color of the car, because of the obvious conflict with his earlier observation.

### In the Media

#### Incredible Claims!

We've had a lot of fun with lunatic headlines from supermarket tabloids in past editions. Here is this edition of "Run for Your Life" headlines:

##### Demons Made Jesse Cheat on Sandra!

"Possibly the same ones that got hold of Tiger Woods," says seer.

##### How to Tell if You've Been Abducted by Aliens

Memory loss, other symptoms can tell for sure, according to Dr. Brad Steiger.

##### Elvis Alive and Working in Vegas as Elvis Impersonator

He's better at it than most of them, reviews say.

##### Beer Can Prevent Prostate Cancer

Very few career drinkers die of it, say medicos.

##### Nebraska Doesn't Exist, Says Author

Admission process was botched, according to historian.

We don't have to make these up.

### Real Life

#### When Personal Observation Fails . . .



According to the Innocence Project, a group in New York that investigates wrongful convictions, eyewitness misidentification is the single greatest cause of conviction of innocent persons. Of all the convictions overturned by DNA analysis, witness misidentification played a role in over 75 percent. Of the first 239 DNA exonerations, 62 percent of the defendants were misidentified by one witness; in 25 percent of the cases, the defendant was misidentified by two witnesses; and in 13 percent of the cases the same innocent defendant was misidentified by three or more separate eyewitnesses. Even though eyewitness testimony can be persuasive before a judge and jury, it is *much* more unreliable than we generally give it credit for being.

But observations and short-term memory are far from infallible, or professional dancer Douglas Hall would not have been awarded \$450,000 in damages by a New York jury in January 2005.\* It seems Dr. Vincent Feldman, twenty minutes after having placed a large "X" on the dancer's right knee, where the latter had complained of pain, sliced open the patient's left knee, which had been perfectly healthy up until that moment, and effectively ended his dancing career in the process. Although he had just *seen* where he was to operate and had marked the spot, he nonetheless managed to confuse the location and the result may have put a serious wrinkle in his own career as well as that of the dancer.

\*New York Post, January 29, 2005.

All kinds of factors influence our observations and our recollections of them, and Dr. Feldman may have been affected by one or more of them: tiredness, distraction, worry about an unrelated matter, or emotional upset could easily account for such mistakes. There are also physical conditions that often affect our observations: bad lighting, lots of noise, the speed of events, and more. We are also sometimes prey to measuring instruments that are inexact, temperamental, or inaccurate. Parker once blew out a tire at high speed as a result of a faulty tire-pressure gauge.

It's also important to remember that people are not all created equal when it comes to making observations. We hate to say it, dear reader, but there are lots of people who see better, hear better, and remember better than you. Of course, that goes for us as well.

Our beliefs, hopes, fears, and expectations affect our observations. Tell someone that a house is infested with rats, and he is likely to believe he sees evidence of rats. Inform someone who believes in ghosts that a house is haunted, and she may well believe she sees evidence of ghosts. At séances staged by the Society for Psychical Research to test the observational powers of people under séance conditions, some observers insist that they see numerous phenomena that simply do not exist. Teachers who are told that the students in a particular class are brighter than usual are very likely to believe that the work those students produce is better than average, even when it is not.

In Chapter 6, we cover a fallacy (a fallacy is a mistake in reasoning) called *wishful thinking*, which occurs when we allow hopes and desires to influence our judgment and color our beliefs. Most of the people who fall for the 4-1-9 Fraud Internet scam (see box, p. 105) are almost surely victims of wishful thinking. It is very unlikely that somebody, somewhere, wants to send you millions of dollars just because you have a bank account and that the money they ask for really is just to facilitate the transaction. The most gullible victim, with no stake in the matter, would probably realize this. But the idea of getting one's hands on a great pile of money can blind a person to even the most obvious facts.

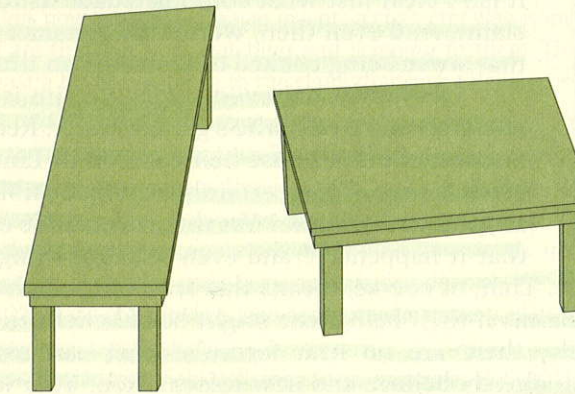
Our personal interests and biases affect our perceptions and the judgments we base on them. We overlook many of the mean and selfish actions of the people we like or love—and when we are infatuated with someone, everything that person does seems wonderful. By contrast, people we detest can hardly do anything that we don't perceive as mean and selfish. If we desperately wish for the success of a project, we are apt to see more evidence for that success than is actually present. On the other hand, if we wish for a project to fail, we are apt to exaggerate flaws that we see in it or imagine flaws that are not there at all. If a job, chore, or decision is one that we wish to avoid, we tend to draw worst-case implications from it and thus come up with reasons for not doing it. However, if we are predisposed to want to do the job or make the decision, we are more likely to focus on whatever positive consequences it might have.

Finally, as we hinted above, the reliability of our observations is no better than the reliability of our memories, except in those cases where we have the means at our disposal to record our observations. And memory, as most of us know, can be deceptive. Critical thinkers are always alert to the possibility that what they remember having observed may not be what they did observe.

But even though firsthand observations are not infallible, they are still the best source of information we have. Any report that conflicts with our own direct observations is subject to serious doubt.

## In Depth

### Incredible but True



Believe it or not, these two tables are identical in both size and shape. You'll probably have to check with a ruler or other straight edge to believe this; we did. The illusion was designed by Roger Shepard (1990). (Reproduced with permission of W. H. Freeman and Company.) This illusion shows how easily our observations can be mistaken—in this case, simply because of perspective. As indicated in the text, many other factors can influence what we think we see.

### Does the Claim Conflict with Our Background Information?

Reports must always be evaluated against our **background information**—that immense body of justified beliefs that consists of facts we learn from our own direct observations and facts we learn from others. Such information is “background” because we may not be able to specify where we learned it, unlike something we know because we witnessed it this morning. Much of our background information is well confirmed by a variety of sources. Reports that conflict with this store of information are usually quite properly dismissed, even if we cannot disprove them through direct observation. We immediately reject the claim “Palm trees grow in abundance near the North Pole,” even though we are not in a position to confirm or disprove the statement by direct observation.

Indeed, this is an example of how we usually treat claims when we first encounter them: We begin by assigning them a certain **initial plausibility**, a rough assessment of how credible a claim seems to us. This assessment depends on how consistent the claim is with our background information—how well it “fits” with that information. If it fits very well, we give the claim some reasonable degree of initial plausibility—there is a reasonable expectation of its being true. If, however, the claim conflicts with our background information, we give it low initial plausibility and lean toward rejecting it unless very strong evidence can be produced on its behalf. The claim “More guitars were sold in the United States last year than saxophones” fits very well with the background information most of us share, and we would hardly require detailed evidence before accepting it. However, the claim “Charlie’s eighty-seven-year-old grandmother swam across Lake Michigan in the

There are three types of men in the world. One type learns from books. One type learns from observation. And one type just has to urinate on the electric fence.

—DR. LAURA SCHLESSINGER  
(reported by Larry Englemann)  
The authority of experience.