

# Asking the Right Questions with Readings

A GUIDE TO CRITICAL THINKING



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## CHAPTER 1

# The Benefit of Asking the Right Questions

### INTRODUCTION

Any of us who enjoy movies are curious about the quality of the latest films. Should we go see them now, wait for them to show up at our preferred rental location, or avoid them altogether? Lots of film experts are available to advise us. But which of their opinions should we follow? Opinions are cheap; anyone can have one of those. But which film expert possesses the kind of knowledge that gives us an opinion on which we can rely? Which film authority provides convincing reasons on a regular basis to support his conclusion?

The authors of this book are film fanatics, but, like you, we do not want to see every film. Deciding which to see is hard work. To make the task easier, we often use one of our favorite Web sites, <http://www.rottentomatoes.com>.

However, as soon as you arrive at that site, you quickly notice that film experts almost never agree among themselves. Pick any movie you wish; check the reviews. Regardless of how many reviewers hated the movie, some reviewer somewhere will string together a positive review. Similarly, pick the most popular movie in history; go to the reviews. What do you find? Some expert thought it was a loser.

This experience is a metaphor for much of life. Doctors, legislators, architects, plumbers, and detectives all disagree among themselves about the proper course of action in particular circumstances. How are we consumers of opinions to respond? The book you are about to read contains the best answer we know. You need to build skills and attitudes that will enable you to decide for yourself which opinions to make your own.

As a thoughtful person you must make a choice about how you will react to what you see and hear. One alternative is to just accept whatever you encounter, doing so automatically results in your making someone else's opinion your own. No one wants to be another person's mental slave.

A more active alternative, something about which you can be justifiably proud, consists of asking questions in an effort to reach a personal decision about the worth of what you have experienced. This book is written for those who prefer the second alternative. While we will give you a lot of guidance about what questions to ask and when to ask them, for now all we want to say is that the path to reasonable conclusions begins with questions.

## CRITICAL THINKING TO THE RESCUE

Listening and reading critically—that is, reacting with systematic evaluation to what you have heard and read—requires a set of skills and attitudes. These skills and attitudes are built around a series of related critical questions. While we will learn them one by one, our goal is to be able to use them together to identify the best decision available. Ideally, the questions will become part of who you are, not just something you read in a book.

We could have expressed them as a list of things you should do, but a system of questions is more consistent with the spirit of curiosity, wonder, and intellectual adventure essential to critical thinking. Thinking carefully is always an unfinished project, a story looking for an ending that will never arrive. Critical questions provide a stimulus and direction for critical thinking; they move us forward toward a continual, ongoing search for better opinions, decisions, or judgments.

Consequently, *critical thinking*, as we will use the term, refers to the following:

1. awareness of a set of interrelated critical questions;
2. ability to ask and answer critical questions at appropriate times; and the
3. desire to actively use the critical questions.

The goal of this book is to encourage you in all three of these dimensions.

Questions require the person being asked the question to act in response. By our questions, we are saying to the person: I am curious; I want to know more; help me. This request shows respect for the other person. The critical questions exist to inform and provide direction for all who hear them. In that respect, critical thinking begins with the desire to improve what we think. We all want *improved* beliefs and conclusions. The point of your questions is to help construct better directions and plans for yourself.

The critical questions are also useful in improving your own writing and speaking because they will assist you when you:

1. react critically to an essay or to evidence presented in a textbook, a periodical, or on a Web site;
2. judge the quality of a lecture or speech;
3. form an argument;
4. write an essay based on a reading assignment; or
5. participate in class.

**Attention:** *Critical thinking consists of an awareness of a set of interrelated critical questions, plus the ability and willingness to ask and answer them at appropriate times.*

As a citizen and consumer, you should find them especially helpful in shaping your voting behavior and your purchasing decisions, as well as in improving your self-confidence by increasing your sense of intellectual independence.

## THE SPONGE AND PANNING FOR GOLD: ALTERNATIVE THINKING STYLES

One common approach to thinking is similar to the way in which a sponge reacts to water: by absorbing. This popular approach has some clear advantages.

First, the more information you absorb about the world, the more capable you are of understanding its complexities. Knowledge you have acquired provides a foundation for more complicated thinking later.

A second advantage of the sponge approach is that it is relatively passive. Rather than requiring strenuous mental effort, it tends to be rather quick and easy, especially when the material is presented in a clear and interesting fashion. The primary mental effort for acting like a sponge involves concentration and memory.

While absorbing information provides a productive start toward becoming a thoughtful person, the sponge approach has a serious and devastating disadvantage: It provides no method for deciding which information and opinions to believe and which to reject. If a reader relied on the sponge approach all the time, he would believe whatever he read last. The idea of being the mental puppet of whomever one happens to encounter is horrible imagery for a person and a community. Decisions become accidents of association, instead of reflective judgments.

We think you would rather choose for yourself what to absorb and what to ignore. To make this choice, you must read with a special attitude—a question-asking attitude. Such a thinking style requires active participation. The writer is trying to speak to you, and you should try to talk back to him, even though he is not present.

We call this interactive approach the panning-for-gold style of thinking. The process of panning for gold provides a model for active readers and listeners as they try to determine the worth of what they read and hear. The task is challenging and sometimes tedious, but the reward can be tremendous. To distinguish the gold from the gravel in a conversation requires you to ask frequent questions and to reflect on the answers.

The sponge approach emphasizes knowledge acquisition; the panning-for-gold approach stresses active interaction with knowledge as it is being

- ✓ Did I ask “why” someone wants me to believe something?
- ✓ Did I take notes as I thought about potential problems with what was being said?
- ✓ Did I evaluate what was being said?
- ✓ Did I form my own conclusion about the topic based on the reasonableness of what was said?

acquired. Thus, the two approaches complement each other. To pan for intellectual gold, there must be something in your pan to evaluate. In addition, to evaluate arguments, we must possess knowledge, dependable opinions.

Let us examine more closely how the two approaches lead to different behavior. What does the individual who takes the sponge approach do when he reads material? He reads sentences carefully, trying to remember as much as he can. He may underline or highlight key words and sentences. He may take notes summarizing the major topics and major points. He checks his underlining or notes to be sure that he is not forgetting anything important. His mission is to find and understand what the author has to say. He memorizes the reasoning, but he doesn't evaluate it.

What does the reader who takes the panning-for-gold approach do? Like the person using the sponge approach, she approaches her reading with the hope that she will acquire new knowledge. There the similarity ends. The panning-for-gold approach requires that the reader asks herself a number of questions designed to uncover the best available decisions or beliefs.

The reader who uses the panning-for-gold approach frequently questions why the author makes various claims. He writes notes to himself in the margins indicating problems with the reasoning. He continually interacts with the material. His intent is to critically evaluate the material and formulate personal conclusions based on the evaluation.

## AN EXAMPLE OF THE PANNING-FOR-GOLD APPROACH

A major enduring issue in American society concerns what kind of gun control laws we need. Let's look at one position on this issue. Try to decide whether the argument is convincing.

Arguments for banning guns are mostly myths, and what we need now is not more laws, but more law enforcement. One myth is that most murderers are ordinary, law-abiding citizens who kill a relative or acquaintance in a moment of anger only because a gun is available. In fact, every study of homicide shows the overwhelming majority of murderers are career criminals, people with

lifelong histories of violence. The typical murderer has a prior criminal history averaging at least six years, with four major felony arrests.

Another myth is that gun owners are ignorant rednecks given to senseless violence. However, studies consistently show that, on the average, gun owners are better educated and have more prestigious jobs than non-owners. To judge by their applications for permits to carry guns, the following are (or were) gun owners: Eleanor Roosevelt, Joan Rivers, Donald Trump, and David Rockefeller.

Even if gun laws do potentially reduce gun-related crime, the present laws are all that are needed if they are enforced. What good would stronger laws do when the courts have demonstrated that they will not enforce them?

If you apply the sponge approach to the passage, you probably will try to remember the reasons that we don't need further controls on guns. If so, you will have absorbed some knowledge. However, how convinced should you be by the above reasons? You can't evaluate them until you have applied the panning-for-gold approach to the passage—that is, until you have asked the right questions.

By asking the right questions, you would discover a number of possible weaknesses in the communicator's arguments. For instance, you might be concerned about all of the following:

1. What does the author mean by “overwhelming majority” or by “typical murderer”? Is the minority still a substantial number of murderers who kill relatives in a moment of anger?
2. What does “gun owners” mean? Are they the ones who buy the kind of guns that gun control advocates are trying to ban?
3. How adequate were the cited research studies? Were the samples sufficiently large, random, and diverse?
4. What possible benefits of gun control are not mentioned? Have important studies that disagree with the author's position been omitted?
5. Is it legitimate to assume that because some famous people own guns, then owning guns is desirable? Do these people have special expertise concerning the pros and cons of gun ownership?
6. How many people killed each year by handguns would not have been killed were such guns not available?
7. Why did the person writing the essay fail to explain how we could encourage better enforcement of existing gun control laws to demonstrate his sensitivity to the harm that guns sometimes facilitate?

If you would enjoy asking these kinds of questions, this book is especially for you. Its primary purpose is to help you know when and how to ask questions that will enable you to decide what to believe.

The most important characteristic of the panning-for-gold approach is interactive involvement—a dialogue between the writer and the reader, or the speaker and the listener. You are willing to agree, but first you need some convincing answers to your questions.

Clearly, there are times when the sponge approach is appropriate. Most of you have used it regularly and have acquired some level of success with it. It is much less likely that you are in the habit of employing the panning-for-gold approach—in part, simply because you have not had the appropriate training and practice. This book will not only help you ask the right questions, but will also provide frequent opportunities for practicing their use.

## PANNING FOR GOLD: ASKING CRITICAL QUESTIONS

It would be relaxing if what other people were really saying were always obvious, if all their essential thoughts were clearly labeled for us, if the writer or speaker never made an error in her reasoning, and if all knowledgeable people agreed about answers to important questions. If this were the case, we could read and listen passively and let others do our thinking for us.

However, the true state of affairs is quite the opposite. A person's reasoning is often not obvious. Important elements are often missing. Many of the elements that are present are unclear. Consequently, you need critical reading and listening skills to help you determine what makes sense and distinguish this clear thinking from the sloppy thinking that characterizes much of what you will encounter.

The inadequacies in what someone says will not always leap out at you. You must be an *active* reader and listener. You can do this by *asking questions*. The best search strategy is a critical-questioning strategy. A powerful advantage of these questions is that they permit you to ask searching questions even when you know very little about the topic being discussed. For example, you do not need to be an expert on childcare to ask critical questions about the adequacy of day-care centers.

## THE MYTH OF THE “RIGHT ANSWER”

Our ability to find definite answers to questions often depends on the type of question that puzzles us. Scientific questions about the physical world are the most likely to have answers that almost all reasonable people will accept, because the physical world is in certain ways more dependable or predictable than the social world. While the precise distance to the moon or the age of a newly discovered bone from an ancient civilization may not be absolutely certain, agreement about the dimensions of our physical environment is widespread. Thus, in the physical sciences, we frequently can arrive at “the right answer.”

Questions about human behavior and about the meaning of our behavior are different. The causes of human behavior are so complex that we frequently

cannot do much more than form intelligent guesses about why or when certain behavior will occur. In addition, because many of us care a great deal about explanations and descriptions of human behavior, we prefer that explanations or descriptions of the rate of abortion, the effects of obesity, or the causes of child abuse be consistent with what we want to believe. Hence, we bring our preferences to any discussion of those issues and resist arguments that are inconsistent with them.

Because human behavior is so controversial and complex, the best answers that we can find for many questions about our behavior will be probabilistic in nature. Even if we were aware of every bit of evidence about the effects of exercise on our mental health, we could still not expect certainty about those effects. We still need to commit to a particular course of action to prevent our becoming a “hollow man” or a “nowhere woman.” But once we acknowledge that our commitments are based on probability and not certainty, we will be much more open to the reasoning of those who are trying to persuade us to change our minds. After all, we may well be wrong about some of our beliefs. We have to listen respectfully to those with whom we disagree. They just may be right.

Regardless of the type of questions being asked, the issues that require your closest scrutiny are usually those about which “reasonable people” disagree. In fact, many issues are interesting exactly because there is strong disagreement about how to resolve them. Any controversy involves more than one position. Several positions may be supported with good reasons. There will seldom be a position on a social controversy about which you will be able to say, “This is clearly the right position on the issue.” If such certainty were possible, reasonable people would not be debating the issue. Our focus in this book will be on such social controversies.

Even though you will not necessarily arrive at the “right answer” to social controversies, this book is designed to give you the skills to develop your best and most reasonable answer, given the nature of the problem and the available information. Decisions usually must be made in the face of uncertainty. Often we will not have the time or the ability to discover many of the important facts about a decision we must make. For example, it is simply unwise to ask all the right questions when someone you love is complaining of sharp chest pains and wants you to transport him to the emergency room.

## THE USEFULNESS OF ASKING THE QUESTION, “WHO CARES?”

Asking good questions is difficult but rewarding work. Some controversies will be much more important to you than others. When the consequences of a controversy for you and your community are minimal, you will want to spend less time and energy thinking critically about it than about more important controversies. For example, it makes sense to critically evaluate

arguments for and against the protection of endangered species, because different positions on this issue lead to important consequences for society. It makes less sense to devote energy to evaluating whether blue is the favorite color of most corporate executives.

Your time is valuable. Before taking the time to critically evaluate an issue, ask the question, “Who cares?”

## WEAK-SENSE AND STRONG-SENSE CRITICAL THINKING

Previous sections mentioned that you already have opinions about many personal and social issues. You are willing right now to take a position on such questions as: Should prostitution be legalized? Is alcoholism a disease or willful misconduct? Was George Bush a successful president? You bring these initial opinions to what you hear and read.

Critical thinking can be used to either (1) defend *or* (2) evaluate and revise your initial beliefs. Professor Richard Paul’s distinction between weak-sense and strong-sense critical thinking helps us appreciate these two antagonistic uses of critical thinking.

**Attention:** *Weak-sense critical thinking is the use of critical thinking to defend your current beliefs. Strong-sense critical thinking is the use of the same skills to evaluate all claims and beliefs, especially your own.*

If you approach critical thinking as a method for defending your initial beliefs or those you are paid to have, you are engaged in *weak-sense critical thinking*. Why is it weak? To use critical-thinking skills in this manner is to be unconcerned with moving toward truth or virtue. The purpose of weak-sense critical thinking is to resist and annihilate opinions and reasoning different from yours. To see domination and victory over those who disagree with you as the objective of critical thinking is to ruin the potentially humane and progressive aspects of critical thinking.

In contrast, *strong-sense critical thinking* requires us to apply the critical questions to all claims, including our own. By forcing ourselves to look critically at our initial beliefs, we help protect against self-deception and conformity. It is easy to just stick with current beliefs, particularly when many people share them. But when we take this easy road, we run the strong risk of making mistakes we could otherwise avoid.

Strong-sense critical thinking does not necessarily force us to give up our initial beliefs. It can provide a basis for strengthening them because critical examination of those beliefs will sometimes reinforce our original commitment to them. A long time ago, John Stuart Mill warned us of the

emptiness of a set of opinions accumulated without the help of strong-sense critical thinking:

He who knows only his side of the case knows little of that. His reasons may have been good, and no one may have been able to refute them. But if he is equally unable to refute the reasons on the opposite side he has no ground for preferring either opinion.

To feel proud of a particular opinion, it should be one we have selected—selected from alternative opinions that we have understood and evaluated.

## THE SATISFACTION OF PANNING FOR GOLD

Doing is usually more fun than watching; doing well is more fun than simply doing. If you start using the interactive process taught in this book, you can feel the same sense of pride in your reading and listening that you normally get from successful participation in physical activities.

Critical thinkers find it satisfying to know when to say “no” to an idea or opinion and to know why that response is appropriate. If you regularly use the panning-for-gold approach, then anything that gets into your head will have been systematically examined first. When an idea or belief *does* pass the criteria developed here, it will make sense to agree with it—at least until new evidence appears.

Imagine how good you will feel if you know *why* you should ignore or accept a particular bit of advice. Frequently, those faced with an opinion different from their own respond by saying, “Oh, that’s just your opinion.” But the issue should not be whose opinion it is, but rather whether it is a good opinion. Armed with the critical questions discussed in this book, you can experience the satisfaction of knowing why certain advice is nonsense.

The sponge approach is often satisfying because it permits you to accumulate information on which you can depend. Reading and listening become much richer as you begin to see things that others may have missed. As you learn to select information and opinions systematically, you will probably desire to read more and more in a lifelong effort to decide which advice makes sense and to talk to people who differ from you in their viewpoints.

## EFFECTIVE COMMUNICATION AND CRITICAL THINKING

Many of the skills you will learn, as you become a more critical thinker, will improve the quality of your writing and speaking. As you write and speak, it helps to be aware of the expectations careful thinkers will have. Because your objective is communication, many of the questions the thoughtful person will

ask in evaluating your writing or speech should serve as guides for your own attempts to communicate well. Several of the critical questions that we urge you to ask highlight problems you will want to avoid as you write or speak.

While the emphasis in this book is on effective thinking, the link to competent communication is so direct that it will be a theme throughout. Wherever appropriate, we will mention how the skill being encouraged is an aid to improved communication.

### THE IMPORTANCE OF PRACTICE

Learning new critical-thinking skills is a lot like learning new physical skills. You cannot learn simply by being told what to do or by watching others. You have to practice, and frequently the practice will be both rewarding and hard work. Our goal is to make your learning as simple as possible. However, acquiring the habit of critical thinking will initially take a lot of practice.

The practice exercises and sample responses at the end of each chapter, starting with Chapter 3, are an important part of this text. Try to do the exercises and, only then, compare your answers with ours. Our answers are not necessarily the only correct ones, but they provide illustrations of how to apply the question-asking skills. We intentionally failed to provide sample answers for the third passage at the end of each chapter. Our objective is to give you the opportunity to struggle with the answer using your knowledge of the chapter you have just studied. We want you to feel the accomplishment of no longer necessarily needing us to guide you.

### THE RIGHT QUESTIONS

To give you an initial sense of the skills that *Asking the Right Questions* will help you acquire, we will list the critical questions for you here. By the end of the book, you should know when and how to ask these questions effectively:

1. What are the issues and the conclusions?
2. What are the reasons?
3. Which words or phrases are ambiguous?
4. What are the value and descriptive assumptions?
5. Are there any fallacies in the reasoning?
6. How good is the evidence?
7. Are there rival causes?
8. Are the statistics deceptive?
9. What significant information is omitted?
10. What reasonable conclusions are possible?

## CHAPTER 2

# Critical Thinking as a Social Activity

Much of our thinking is not a solo activity; it involves other people. We move forward by listening to other people; without them we are lost as learners. Critical thinking leans heavily on being able to listen with respect to what others have to say. The conclusions we hold at any time are the fruit of our interactions with family, friends, teachers, and a wide assortment of influential members of our larger community. We can handle these interactions in a manner that stimulates our continued growth as a thinking person. However, if we are not careful, we can work, live, and play with others in a manner that will shut off the many insights possessed by our associates. By assisting us to work more effectively with other people this chapter can be seen as a booster chair, raising us to a higher level of skill as a thinker.

But we would be oversimplifying the social dimension of critical thinking if we did not think carefully about the negative effects that other people can have on our reasoning. Part of being an effective critical thinker is *thinking for yourself*. Yes, you learn from and with other people. BUT your interactions with other people can prevent you from thinking critically. Out of respect for this problem, this chapter concludes by increasing your awareness of the dangers of social interaction for those of us wishing to think for ourselves.

### VALUES AND OTHER PEOPLE

Think of other people as your most valuable resource, the basis for the facts, opinions, and conclusions that you will eventually have. In an important and ongoing manner, other people are part of your extended family, those who nurture your conclusions. The theme here is connectedness.



How these interactions work is shaped by your values and the values you perceive in those with whom you interact. Before you can discover the importance of values in shaping conclusions, you must have some understanding of what a value is. *Values*, as we will use the term, are ideas that someone thinks are worthwhile. You will find that it is the importance one assigns to *abstract ideas* that has the major influence on one's choices and behavior.

Usually objects, experiences, and actions are desired because of some idea we value. For example, we may choose to do things that provide us with contacts with important people. We value "important people" (concrete idea) because we value "status" (abstract idea). When we use the word *value* in this chapter, we will be referring to an (abstract) idea representing what someone thinks is important and good.

**Attention:** *Values are the unstated ideas that people see as worthwhile. They provide standards of conduct by which we measure the quality of human behavior.*

To better familiarize yourself with values, write down some of your own values. Try to avoid writing down the names of people, tangible objects, or actions. Pizza and playing tennis may be important to you, but it is the importance you assign to abstract ideas that most influences your choices and behavior concerning controversial public issues. Your willingness to argue for or against capital punishment, for instance, is strongly related to the importance you assign to the sanctity of human life—an abstract idea. The sanctity of human life is a value that affects our opinions about war, abortion, drug usage, and mercy killing. As you create your list of values, focus on those that are so significant that they affect your opinions and behavior in many ways.

Did you have problems making your list? We can suggest two further aids that may help. First, another definition! Values are *standards of conduct* that we endorse and expect people to meet. When we expect our political representatives to "tell the truth," we are indicating to them and to ourselves that honesty is one of our most cherished values. Ask yourself what you expect your friends to be like. What standards of conduct would you want your children to develop? Answers to these questions should help you enlarge your understanding of values.

Now let us give you an aid for identifying values—a list of a few commonly held values. Every value on our list may be an attractive candidate for your list. Thus, after you look at our list, pause for a moment and choose those values that are most important to you. They will be those values that most often play a role in shaping your opinions and behavior.

Common Values

adventure	courage	justice
ambition	excellence	rationality
autonomy	flexibility	security
collective responsibility	freedom of speech	spontaneity
comfort	generosity	tolerance
competition	harmony	tradition
cooperation	honesty	wisdom

Let's remind ourselves how knowledge about values relates to the social nature of critical thinking. While we must require ourselves to listen deeply to those who have value priorities different from our own, the most obvious social link established by values is similarity. Those of us who see individual responsibility as an extremely important value tend to be comfortable with and to seek out those who similarly believe that *improved personal choices* are the solution to most human problems. Hence, many of our most valuable social interactions or learning experiences start with communications among those with similar value priorities. Our huge challenge in this regard is to require ourselves to work hard to understand the reasoning of those whose value priorities *differ* from ours.

THE PRIMARY VALUES OF A CRITICAL THINKER

Our normal tendency to listen to only those with similar value priorities needs our active resistance. We have to fight against the tendency.

Let us give you some ammunition. This book is dedicated to help you become a critical thinker. As a critical thinker, you will be pursuing *better* conclusions, *better* beliefs, and *better* decisions. Certain values advance your effort to do so; others do not. By knowing and appreciating the primary values of a critical thinker, you have some mental muscle that you can use to remind yourself of the necessity of your paying close attention to those who do not share your value priorities.

What are the primary values of a critical thinker?

- **Autonomy.** At first this value may have little to do with encouraging people to pay attention to those with different perspectives. How does a drive to form one's own conclusions encourage us in any fashion to seek and listen to views that are not our own? Ah! And what raw material should you use in pursuing this autonomy? Surely, we all want to pick and choose from the widest possible array of possibilities; otherwise, we may miss the one decision or option that we *would have chosen* if only

we had not paid attention solely to those who shared our value priorities. Supercarged autonomy requires us to listen to those with value priorities different from our own. For example, Democrats make a huge mistake when they listen only to other Democrats.

- **Curiosity.** To take advantage of the panning-for-gold method of living your life, you need to listen and read, **really** listen and read. Other people have the power to move you forward, to liberate you from your current condition of partial knowledge. To be a critical thinker requires you to then ask questions about what you have encountered. Part of what you gain from other people is their insights and understanding, **when what they have to offer meets the standards of good reasoning** that you will learn in *Asking the Right Questions*.

- **Humility.** Recognizing that even the smartest person in the world makes many mistakes each week provides the ideal platform for engaging actively with other people. Certainly some of us have insights that others do not have, but each of us is very limited in what we can do, and at honest moments we echo Socrates when he said that he knew that he did not know. Once we accept this reality, we can better recognize that our experiences with other people can fill in at least a few of the gaps in our present understanding.

- **Respect for good reasoning wherever you find it.** While we want to respect and listen to other voices, all conclusions or all opinions are not equally worthwhile. The critical questions you will learn as you study this book provide a framework to assist you in picking and choosing from among all the ideas trying to influence you. When you find strong reasoning, regardless of the race, age, wealth, or citizenship of the speaker or writer, rely on it until a better set of reasoning comes along.

Live by these value priorities, and you can have justifiable satisfaction about the beliefs you possess. Live by these value priorities, and you will keep searching for additional evidence that strengthens these beliefs, as well as for new reasons and evidence that might alter your beliefs. By all means act with confidence based on your beliefs, but hold your conclusions with only that degree of firmness that permits you to still wonder to yourself, “Might I be wrong?”

## THINKING AND FEELINGS

Making a list of the primary values of a critical thinker and describing them is relatively easy. But living those values is extraordinarily difficult. When you first encounter a conclusion, you do so with a history. You have learned to care about certain things, to support particular interests, and to discount claims of a particular type. So you always start to think critically in the midst of existing opinions. You have emotional commitments to these existing opinions.

They are *your* opinions, and you quite understandably feel protective of them. It almost seems as if you are admitting you have been a gigantic failure when you change your mind. Having the courage to change your mind in the face of stronger reasoning that points you in a new direction requires superior dedication to creating the very best version of yourself that can be created. There is certainly no wisdom in changing your mind all the time just to show you are flexible. But when you encounter new evidence and fresh reasons that you can see are better than what you had been relying on, you owe it to yourself to move forward. You want to embrace this modified picture of your world, confident that it is more reliable.

Keep in mind that when we are thinking, we have a purpose. In other words, we think to achieve something. When our thinking is motivated by a desire to keep heading in the same direction as our previous thinking, we are not reflecting the values of a critical thinker. Instead, we are an advocate, searching for better ways to protect the views we currently hold. From this perspective, to think is to defend. The brighter alternative is to think so that we can achieve more depth and better accuracy. To achieve that purpose, we have to train ourselves to listen to the arguments of those with whom we disagree. We are already familiar with our own arguments; we stand to learn the most by familiarizing with those other arguments, the ones we really have not explored very thoroughly.

This point deserves special emphasis. We bring lots of personal baggage to every decision we make—experiences, dreams, values, training, and cultural habits.

However, if you are to grow, you need to recognize these feelings, and, as much as you are able, put them on a shelf for a bit. Only that effort will enable you to listen carefully when others offer arguments that threaten or violate your current beliefs. This openness is important because many of our own positions on issues are not especially reasonable ones; they are opinions given to us by others, and over many years we develop emotional attachments to them. Indeed, we frequently believe that we are being personally attacked when someone presents a conclusion contrary to our own. The danger of being emotionally involved in an issue is that you may fail to consider potential good reasons for other positions—reasons that might be sufficient to change your mind on the issue if only you would listen to them.

**Remember:** Emotional involvement should not be the primary basis for accepting or rejecting a position. Ideally, emotional involvement should be most intense *after* reasoning has occurred. Thus, when you read, try to avoid letting emotional involvement cut you off from the reasoning of those with whom you initially disagree. A successful active learner is one who is willing to change his mind. If you are ever to change your mind, you must be as open as possible to ideas that strike you as weird or dangerous when you first encounter them.

Critical thinkers, however, are not machines. They care greatly about many issues. The depth of that concern can be seen in their willingness to do



all the hard mental work associated with critical thinking. But any passion felt by critical thinkers is moderated by the recognition that their current beliefs are open to revision.

## KEEPING THE CONVERSATION GOING

Because critical thinking is a social activity, we need to consider how other people are likely to react to us when we ask them questions about their beliefs and conclusions. As long as we are interacting with others who share the primary values of critical thinking, our questions will be received as evidence that we are a partner in the search for better answers to the questions we share. But that terrific opportunity to grow together is not going to be the only kind of social interaction you will have.

Many people are not eager to have their thinking questioned; often they experience questioning as annoying and unfriendly. Some may wonder, "Why is she asking me all these challenging questions? Why does she not just agree with me?" Don't be surprised if someone reacts to your quest to learn more by asking you why you are being so mean. Many people are unaccustomed to situations where someone is so excited to know more about why a particular viewpoint is held.

The new critical thinker may be confused by this reaction. Later in Chapter 4 we will introduce in a formal sense the concept of "an argument." What do you think about when you see that word? In ordinary conversation, an argument refers to a disagreement, a time when blood pressure soars. In this sense to argue is to try to win, to somehow dominate the other person.

For example, in a bestselling book a decade ago, Gerry Spence taught readers *How to Argue and Win Every Time*. He claimed in the subtitle of the book that he would teach the reader how to win *At Home, At Work, In Court, Everywhere, Everyday*. He urged readers to be winners and not losers.

That kind of attitude would put a dramatic end, in many instances, to critical thinking, as we understand it. The conversation would be over prematurely. Who wants to participate for long in a situation where winning, not learning, is the focus? What kind of arrogance would make any of us think that we should win all arguments? Such an approach sounds more like war than like curious thinkers at work.

For purposes of critical thinking, an argument is altogether something very different from a battle. Because we see argument as the mechanism whereby we fertilize and prune our current conclusions, we will use the concept in a very different manner. An *argument* is a combination of two forms of statements: a conclusion and the reasons allegedly supporting it. The partnership between reasons and conclusion establishes a person's argument. It is something we provide because we care about how people live their lives and what they believe. Our continual improvement depends on someone's caring enough about us to offer us arguments and to evaluate the ones we make. Only then will we be able to develop as thoughtful people.



Ending the conversation before it starts

What can we do to assure those we are interacting with that we are genuine seekers who care about truth and who respect reason wherever we find it, even in the mouths or pages of those who almost never agree with us? How can you relate to other people such that they will join you in productive interchange?

As with so much behavior that affects other people, we can establish some basic ground rules for using critical thinking with others by asking how we want them to interact with us. First, we want an assurance that they respect us in the sense that they will try to hear us. They are speaking with us, not at us. In addition, we want them to be able to distinguish between a conclusion we hold and the many components that make us who we are. We want them to recognize that there is no need to engage in some kind of personal attack simply because we disagree; there are no doubt many other things about which we do agree. A person is so much more than a single conclusion.

Above all else, when you use your critical thinking, make it clear to other people that you want to learn. Furthermore, give them assurances that you wish them well, and that any disagreement you have with them, as serious and important as that disagreement might be, need not result in a verbal bloodbath. What follows are a few verbal strategies that you can use to keep the conversation going:

1. Try to clarify your understanding of what the other person said by asking: "Did I hear you say \_\_\_\_\_?"
2. Ask the other person whether there is any evidence that would cause him to change his mind.
3. Suggest a time-out period in which each of you will try to find the very best evidence for the conclusion you hold.

4. Ask why the person thinks the evidence on which you are relying is so weak.
5. Try to come together. If you take that person's best reasons and put them together with your best reasons, is there some conclusion that both of you could embrace?
6. Search for common values or other shared conclusions to serve as a basis for determining where the disagreement first appeared in your conversation.
7. Try to present a model of caring and calm curiosity; as soon as the verbal heat turns up, try to remind yourselves that you are learners, not warriors.
8. Make certain that your face and body suggest humility, rather than the demeanor of a know-it-all.

## AVOIDING THE DANGERS OF GROUPTHINK

We conclude this chapter with a warning. Social interactions have the potential to harm your thinking when you are not careful. As social beings, we understandably wish others to think well of us. When the people with whom we interact are collectively engaged in sloppy reasoning, the pressures to go along with them can test the character of even the best critical thinkers. A person with a minority point of view cannot help but wonder when faced with a large number of people who believe something else, "Did I miss something?"

In 1972 Irving Janis coined the term *groupthink* to capture the negative effects of group pressure on our thinking. Especially dangerous are closely knit groups who are thinking sloppily because independent thinking in such a setting seems disloyal and rude. Good illustrations are available from many of the wars we have fought. Leaders who are quite capable of critical thinking in certain settings surround themselves with people who tell them what they want to hear, and each time another member of the group announces support for the decision to go to war, the group feels more and more hostility toward anyone who might question the evidence justifying war. When we see people who should know better fail to ask critical questions, it should give us all pause. Being a critical thinker takes constant vigilance.

As with the story of the young child who was the only one willing to say out loud that the emperor was wearing no clothes at all, being willing to ask critical questions in the midst of groupthink can provide the greatest possible service to the long-run interests of the group, whether it is a society, a family, or a bunch of friends. The approval of other people can be a huge obstacle to critical thinking, but only if we let it be. The best medicine for curing the tendency to go along with a group when it is relying on sloppy thinking is your confidence in the wisdom of being a critical thinker—looking for the best reasoning, regardless of what other people are doing.

## CHAPTER 3

# What Are the Issue and the Conclusion?

Before we evaluate someone's reasoning, we must first find it. Doing so sounds simple; it isn't. To get started as a critical thinker, you must practice the identification of the issue and the conclusion. Start by considering how you might begin questioning the following brief essay.

Cell phones are becoming a large part of today's society bringing with them benefits and drawbacks. They are beneficial for those with tight schedules and in case of emergencies. Cell phones can also come in handy for parents to check up on their children. Even though cell phones do carry benefits, the drawbacks are in their inappropriate use. When a cell phone rings or owners talk on them during a lecture or a concert, a major disruption in the concentration of others is inevitable. Even though there are suggestions in polite society to leave them off, perhaps we need stronger penalties associated with abuse of the growing population of cell phones.

The person who wrote this assessment of cell phones very much wants you to believe something. But what is that something and why are we supposed to believe any such thing?

In general, those who create Web pages, editorials, books, magazine articles, or speeches are trying to change your perceptions or beliefs. For you to form a reasonable reaction to their persuasive effort, you must first identify the controversy or *issue* as well as the thesis or conclusion being pushed onto you. (Someone's *conclusion* is her intended message to you. Its purpose is to shape your beliefs and/or behavior.) Fail to identify the author's conclusion, and you will be reacting to a distorted version of the attempted communication.

When we read or listen, it is so easy to ignore what was said in the previous paragraph. We often react to the images, dramatic illustrations, or tone