

2 Thinking Critically



In ancient Greece, most advanced students studied philosophy in order to achieve “wisdom.” (The term *philosophy* in Greek means “lover of wisdom.”) In today’s world, many college students are hoping, through their studies, to become the modern-day equivalent: informed, *critical thinkers*. A critical thinker is someone who has developed a knowledgeable understanding of our complex world, a thoughtful perspective on important ideas and timely issues, the capacity for penetrating insight and intelligent judgment, and sophisticated thinking and language abilities.

The word *critical* comes from the Greek word for “critic” (*kritikos*), which means “to question, to make sense of, to be able to analyze.” It is by questioning, making sense of situations, and analyzing issues that we examine our thinking and the thinking of others. These critical activities aid us in reaching the best possible conclusions and decisions. The word *critical* is also related to the word *criticize*, which means “to question and evaluate.” Unfortunately, the ability to criticize is often only used destructively, to tear down someone else’s thinking. Criticism, however, can also be *constructive*—analyzing for the purpose of developing a better understanding of what is going on. We will engage in constructive criticism as we develop our ability to think critically.

Thinking is the way you make sense of the world; thinking critically is thinking about your thinking so that you can clarify and improve it. In this chapter you will explore ways to examine your thinking so that you can develop it to the fullest extent possible. That is, you will discover how to *think critically*.

Becoming a critical thinker transforms you in positive ways by enabling you to become an expert learner, view the world clearly, and make productive choices as you shape your life. Critical thinking is not simply one way of thinking; it is a total approach to understanding how you make sense of a world that includes many parts.

The best way to develop a clear and concrete idea of the critical thinker you want to become is to think about people you have known who can serve as critical-thinking models. They appear throughout humanity. The Greek philosopher Socrates was in many ways the original critical thinker for whom we have a historical record, and the depth and clarity of his thinking is immortalized in the *Dialogues* recorded by Plato, his student. As a renowned teacher in his native city of Athens, Socrates had created his own school and spent decades teaching young people how to analyze important issues through dialectical questioning—an approach that became known as the Socratic Method. At the age of seventy, he was deemed a dangerous troublemaker by some of the ruling politicians. Based on his teachings, students were asking embarrassing questions; in particular, they were questioning the politicians’ authority and threatening their political careers. Those publicly accusing him gave Socrates an ultimatum: Either leave the city where he had spent his entire life, never to return, or be put to death. Rather than leave his beloved Athens and the life he had created, Socrates chose death. Surrounded by his family and friends, he calmly drank a cup of hemlock-laced tea. He reasoned that leaving Athens would violate the intellectual integrity upon which he had built his life and had taught his students to uphold. Instead of sacrificing his beliefs, he ended his life,

concluding with the words: “Now it is time for us to part, I to die and you to live. Whether life or death is better is known to God, and to God only.”

Today especially, we all need to become philosophers, to develop a philosophical framework. Critical thinking is a modern reworking of a philosophical perspective.

Who would *you* identify as expert critical thinkers? To qualify, the people you identify should have lively, energetic minds. Specifically, they should be:

- **Open-minded:** In discussions they listen carefully to every viewpoint, evaluating each perspective carefully and fairly.
- **Knowledgeable:** When they offer an opinion, it’s always based on facts or evidence. On the other hand, if they lack knowledge of the subject, they acknowledge this.
- **Mentally active:** They take initiative and actively use their intelligence to confront problems and meet challenges instead of simply responding passively to events.
- **Curious:** They explore situations with probing questions that penetrate beneath the surface of issues instead of being satisfied with superficial explanations.
- **Independent thinkers:** They are not afraid to disagree with the group opinion. They develop well-supported beliefs through thoughtful analysis instead of uncritically “borrowing” the beliefs of others or simply going along with the crowd.
- **Skilled discussants:** They are able to discuss ideas in an organized and intelligent way. Even when the issues are controversial, they listen carefully to opposing viewpoints and respond thoughtfully.
- **Insightful:** They are able to get to the heart of the issue or problem. While others may be distracted by details, they are able to zero in on the essence, seeing the “forest” as well as the “trees.”
- **Self-aware:** They are aware of their own biases and are quick to point them out and take them into consideration when analyzing a situation.
- **Creative:** They can break out of established patterns of thinking and approach situations from innovative directions.
- **Passionate:** They have a passion for understanding and are always striving to see issues and problems with more clarity.



Thinking Activity 2.1

WHO IS A CRITICAL THINKER?

Think about people you know whom you admire as expert thinkers and list some of the qualities these people exhibit that you believe qualify them as “critical thinkers.” For each critical-thinking quality, write down a brief example involving



Visual Thinking

“Now It Is Time for Us to Part, I to Die and You to Live . . .”

What can you tell about Socrates' reaction to his impending death based on this painting by Jacques-Louis David? What is the reaction of his family and friends? If you were a close friend of Socrates, what would be your reaction? Why?



the person. Identifying such people will help you visualize the kind of people you'd like to emulate. As you think your way through this book, you will be creating a *portrait* of the kind of critical thinker you are striving to become, a *blueprint* you can use to direct your development and chart your progress.

This chapter explores some of the cognitive abilities and attitudes that characterize critical thinkers, including the following:

- Thinking actively
- Carefully exploring situations with questions
- Thinking independently
- Viewing situations from different perspectives
- Supporting diverse perspectives with reasons and evidence
- Discussing ideas in an organized way

The remaining chapters in the book examine additional thinking abilities that you will need to develop in order to become a fully mature critical thinker.

Thinking Actively

When you think critically, you are actively using your intelligence, knowledge, and abilities to deal effectively with life's situations. When you think actively, you are:

- Getting involved in potentially useful projects and activities instead of remaining disengaged
- Taking initiative in making decisions on your own instead of waiting passively to be told what to think or do
- Following through on your commitments instead of giving up when you encounter difficulties
- Taking responsibility for the consequences of your decisions rather than unjustifiably blaming others or events “beyond your control”

When you think actively, you are not just waiting for something to happen. You are engaged in the process of achieving goals, making decisions, and solving problems. When you react passively, you let events control you or permit others to do your thinking for you. Thinking critically requires that you think actively—not react passively—to deal effectively with life's situations.

Influences on Your Thinking

As our minds grow and develop, we are exposed to influences that encourage us to think actively. We also have many experiences, however, that encourage us to think passively. For example, some analysts believe that when people, especially children, spend much of their time watching television, they are being influenced to think passively, thus inhibiting their intellectual growth. Listed here are some of the influences we experience in our lives along with space for you to add your own influences. As you read through the list, place an *A* next to those items you believe in general influence you to think *actively* and a *P* next to those you consider to be generally *passive* influences.

Activities:

Reading books
 Writing
 Watching television
 Dancing
 Drawing/painting
 Playing video games
 Playing sports
 Listening to music

People:

Family members
 Friends
 Employers
 Advertisers
 School/college teachers
 Police officers
 Religious leaders
 Politicians

(etc.)



Thinking Activity 2.2

INFLUENCES ON OUR THINKING

All of us are subject to powerful influences on our thinking, influences that we are often unaware of. For example, advertisers spend billions of dollars to manipulate our thinking in ways that are complex and subtle. For this exercise, choose one of the following tasks:

1. Watch some commercials, with several other class members if possible, and discuss the techniques each advertiser is using to shape your thinking. Analyze with the other viewers how each of the elements in a commercial—images, language, music—affects an audience. Pay particular attention to the symbolic associations of various images and words, and identify the powerful emotions that these associations elicit. Why are the commercials effective? What influential roles do commercials play in our culture as a whole?
2. Select a commercial website and do an in-depth analysis of it. Explain how each of the site's elements—design, content, use of music or video, and links—works to influence our thinking.

Of course, in many cases people and activities can act as both active and passive influences, depending on the situations and our individual responses. For example, consider employers. If we are performing a routine, repetitive job, work tends to encourage passive, uncreative thinking. We are also influenced to think passively if our employer gives us detailed instructions for performing every task, instructions that permit no exception or deviation. On the other hand, when our employer gives us general areas of responsibility within which we are expected to make thoughtful and creative decisions, then we are being stimulated to think actively and independently.

Becoming an Active Learner

Active thinking is one of the keys to effective learning. Each of us has our own knowledge framework that we use to make sense of the world, a framework that incorporates all that we have learned in our lives. When we learn something new, we have to find ways to integrate this new information or skill into our existing knowledge framework. For example, if one of your professors is presenting material on Sigmund Freud's concept of the unconscious or the role of Heisenberg's uncertainty principle in the theory of quantum mechanics, you need to find ways to relate these new ideas to things you already know in order to make this new information "your own." How do you do this? By actively using your mind to integrate new information into your existing knowledge framework, thereby expanding the framework to include this new information.

For instance, when your professor provides a detailed analysis of Freud's concept of the unconscious, you use your mind to call up what you know about Freud's theory of personality and what you know of the concept of the unconscious. You

then try to connect this new information to what you already know, integrating it into your expanding knowledge framework. In a way, learning is analogous to the activity of eating: You ingest food (*information*) in one form, actively transform it through digestion (*mental processing*), and then integrate the result into the ongoing functioning of your body.

Carefully Exploring Situations with Questions

Thinking critically involves actively using your thinking abilities to attack problems, meet challenges, and analyze issues. An important dimension of thinking actively is the ability to ask appropriate and penetrating questions. Active learners explore the learning situations they are involved in with questions that enable them to understand the material or task at hand and then integrate this new understanding into their knowledge framework. In contrast, passive learners rarely ask questions. Instead, they try to absorb information like sponges, memorizing what is expected and then regurgitating what they memorized on tests and quizzes.

Questions can be classified in terms of the ways that people organize and interpret information. We can identify six such categories of questions, a schema that was first suggested by the educator Benjamin Bloom:

- | | |
|-------------------|----------------|
| 1. Fact | 4. Synthesis |
| 2. Interpretation | 5. Evaluation |
| 3. Analysis | 6. Application |

Active learners are able to ask appropriate questions from all of these categories. These various types of questions are closely interrelated, and an effective thinker is able to use them in a productive relation to one another. These categories of questions are also very general and at times overlap with one another. This means that a given question may fall into more than one of the six categories of questions. Following is a summary of the six categories of questions.

ONLINE RESOURCES

Visit the student website for *Thinking Critically* at college.hmco.com/pic/chaffeetc9e for sample forms of questions from each category identified by Benjamin Bloom.

1. **Questions of Fact:** Questions of fact seek to determine the basic information of a situation: who, what, when, where, how. These questions seek information that is relatively straightforward and objective.
2. **Questions of Interpretation:** Questions of interpretation seek to select and organize facts and ideas, discovering the relationships among them. Examples of such relationships include the following:
 - **Chronological relationships:** relating things in time sequence
 - **Process relationships:** relating aspects of growth, development, or change

- **Comparison/contrast relationships:** relating things in terms of their similar/different features
 - **Causal relationships:** relating events in terms of the way some events are responsible for bringing about other events
3. **Questions of Analysis:** Questions of analysis seek to separate an entire process or situation into its component parts and to understand the relation of these parts to the whole. These questions attempt to classify various elements, outline component structures, articulate various possibilities, and clarify the reasoning being presented.
 4. **Questions of Synthesis:** Questions of synthesis combine ideas to form a new whole or come to a conclusion, making inferences about future events, creating solutions, and designing plans of action.
 5. **Questions of Evaluation:** The aim of evaluation questions is to help us make informed judgments and decisions by determining the relative value, truth, or reliability of things. The process of evaluation involves identifying the criteria or standards we are using and then determining to what extent the things in common meet those standards.
 6. **Questions of Application:** The aim of application questions is to help us take the knowledge or concepts we have gained in one situation and apply them to other situations.

Mastering these forms of questions and using them appropriately will serve as powerful tools in your learning process.

Becoming an expert questioner is an ongoing project. When you are talking to people about even everyday topics, get in the habit of asking questions from all of the different categories. Similarly, when you are attending class, taking notes, or reading assignments, make a practice of asking—and trying to answer—appropriate questions.

As children, we were natural questioners, but this questioning attitude was often discouraged when we entered the school system. Often we were given the message, in subtle and not so subtle ways, that “schools have the questions; your job is to learn the answers.” The educator Neil Postman has said: “Children enter schools as question marks and they leave as periods.” In order for us to become critical thinkers and effective learners, we have to become question marks again.



Thinking Activity 2.3

ANALYZING A COMPLEX ISSUE

Review the following decision-making situation (based on an incident that happened in Springfield, Missouri), and then critically examine it by posing questions from each of the six categories we have considered in this section:

1. Fact
2. Interpretation
3. Analysis
4. Synthesis
5. Evaluation
6. Application

Imagine that you are a member of a student group at your college that has decided to stage the controversial play *The Normal Heart* by Larry Kramer. The play is based on the lives of real people and dramatizes their experiences in the early stages of the AIDS epidemic. It focuses on their efforts to publicize the horrific nature of this disease and to secure funding from a reluctant federal government to find a cure. The play is considered controversial because of its exclusive focus on the subject of AIDS, its explicit homosexual themes, and the large amount of profanity contained in the script. After lengthy discussion, however, your student group has decided that the educational and moral benefits of the play render it a valuable contribution to the life of the college.

While the play is in rehearsal, a local politician seizes upon it as an issue and mounts a political and public relations campaign against it. She distributes selected excerpts of the play to newspapers, religious groups, and civic organizations. She also introduces a bill in the state legislature to withdraw state funding for the college if the play is performed. The play creates a firestorm of controversy, replete with local and national news reports, editorials, and impassioned speeches for and against it. Everyone associated with the play is subjected to verbal harassment, threats, crank phone calls, and hate mail. The firestorm explodes when the house of one of the key spokespersons for the play is burned to the ground. The director and actors go into hiding for their safety, rehearsing in secret and moving from hotel to hotel.

Your student group has just convened to decide what course of action to take. Analyze the situation using the six types of questions listed previously and then conclude with your decision and the reasons that support your decision.

Thinking Independently

Answer the following questions with *yes*, *no*, or *not sure*, based on what you believe to be true.

1. Is the earth flat?
2. Is there a God?
3. Is abortion wrong?
4. Have alien life forms visited the earth?
5. Should men be the breadwinners and women the homemakers?

Your responses to these questions reveal aspects of the way your mind works. How did you arrive at these conclusions? Your views on these and many other issues probably had their beginnings with your family. As we grow up, we learn how to think, feel, and behave in various situations. In addition to our parents, our “teachers” include our brothers and sisters, friends, religious leaders, schoolteachers, books, television, and the Internet. Most of what we learn we absorb without even being aware of the process. Many of your ideas about the issues raised in the preceding questions were most likely shaped by the experiences you had growing up.

As a result of our ongoing experiences, however, our minds—and our thinking—continue to mature. Instead of simply accepting the views of others, we use this standard to make our decisions: Are there good reasons or evidence that support this thinking? If there are good reasons, we can actively decide to adopt these ideas. If they do not make sense, we can modify or reject them.

How do you know when you have examined and adopted ideas yourself instead of simply borrowing them from others? One indication of having thought through your ideas is being able to explain *why* you believe them, explaining the reasons that led you to these conclusions.

For each of the views you expressed at the beginning of this section, explain how you arrived at it and give the reasons and evidence that you believe support it.

EXAMPLE: Is the earth flat?

EXPLANATION: I was taught by my parents and in school that the earth was round.

REASONS/EVIDENCE:

- a. *Authorities*: My parents and teachers taught me this.
- b. *References*: I read about this in science textbooks.
- c. *Factual evidence*: I have seen a sequence of photographs taken from outer space that show the earth as a globe.
- d. *Personal experience*: When I flew across the country, I could see the horizon line changing.

Of course, not all reasons and evidence are equally strong or accurate. For example, before the fifteenth century some people believed that the earth was flat. This belief was supported by the following reasons and evidence:

- *Authorities*: Educational and religious authorities taught people the earth was flat.
- *References*: The written opinions of scientific experts supported the belief that the earth was flat.
- *Factual evidence*: No person had ever circumnavigated the earth.
- *Personal experience*: From a normal vantage point, the earth looks flat.

Many considerations go into evaluating the strengths and accuracy of reasons and evidence. Let's examine some basic questions that critical thinkers automatically consider when evaluating reasons and evidence by completing Thinking Activity 2.4.



Thinking Activity 2.4

EVALUATING YOUR BELIEFS

Evaluate the strengths and accuracy of the reasons and evidence you identified to support your beliefs on the five issues by addressing questions such as the following:

- **Authorities**: Are the authorities knowledgeable in this area? Are they reliable? Have they ever given inaccurate information? Do other authorities disagree with them?

- **References:** What are the credentials of the authors? Are there other authors who disagree with their opinions? On what reasons and evidence do the authors base their opinions?
- **Factual evidence:** What are the source and foundation of the evidence? Can the evidence be interpreted differently? Does the evidence support the conclusion?
- **Personal experience:** What were the circumstances under which the experiences took place? Were distortions or mistakes in perception possible? Have other people had either similar or conflicting experiences? Are there other explanations for the experience?

In critically evaluating beliefs, it makes sense to accept traditional beliefs if they enrich and sharpen our thinking. If they don't stand up to critical scrutiny, then we need to have the courage to think for ourselves, even if it means rejecting "conventional wisdom."

Thinking for yourself doesn't always mean doing exactly what you want to; it may mean becoming aware of the social guidelines and expectations of a given situation and then making an informed decision about what is in your best interests. Thinking for yourself often involves balancing your view of things against those of others, integrating yourself into social structures without sacrificing your independence or personal autonomy.

Viewing Situations from Different Perspectives

Although it is important to think for yourself, others may have good ideas from which you can learn and benefit. A critical thinker is willing to listen to and examine carefully other views and new ideas.

As children we understand the world from only our own point of view. As we grow, we come into contact with people who have different viewpoints and begin to realize that our viewpoint is often inadequate, we are frequently mistaken, and our perspective is only one of many. If we are going to learn and develop, we must try to understand and appreciate the viewpoints of others. For example, consider the following situation:

Imagine that you have been employed at a new job for the past six months. Although you enjoy the challenge of your responsibilities and you are performing well, you find that you simply cannot complete all your work during office hours. To keep up, you have to work late, take work home, and even occasionally work on weekends. When you explain this to your employer, she says that, although she is sorry that the job interferes with your personal life, it has to be done. She suggests that you view these sacrifices as an investment in your future and that you should try to work more efficiently. She reminds you that there are many people who would be happy to have your position.

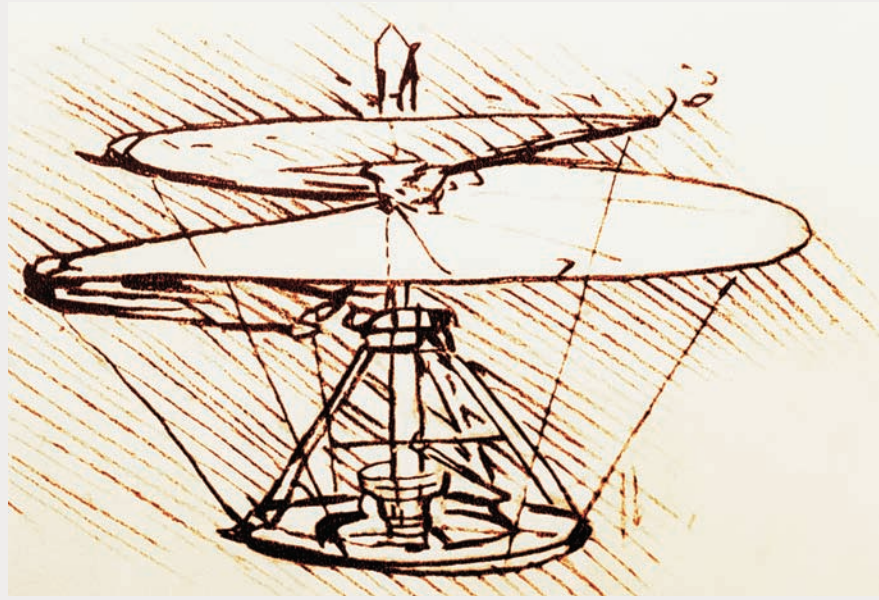
1. Describe this situation from your employer's standpoint, identifying reasons that might support her views.



Visual Thinking

Thinking Independently

Leonardo da Vinci was an astonishingly independent thinker. For example, he depicted this idea of a helicopter centuries before anyone else conceived of it. But many people are not independent thinkers. What are the reasons that people too often get locked into passive, dependent ways of thinking? What strategies can we use to overcome these forces and think independently? Describe a time when you took an independent, and unpopular, stand on an issue. What was the experience like?



2. Describe some different approaches that you and your employer might take to help resolve this situation.

For most of the important issues and problems in your life, one viewpoint is simply not adequate to provide a full and satisfactory understanding. To increase and deepen your knowledge, you must seek *other perspectives* on the situations you are trying to understand. You can sometimes accomplish this by using your imagination to visualize other viewpoints. Usually, however, you need to seek actively (and *listen* to) the viewpoints of others. It is often very difficult for people to see things from points of view other than their own, and if you are not careful, you can make the mistake of thinking that the way you see things is the way things really are. In addition to identifying with perspectives other than your own, you also have to work to understand the *reasons* that support these alternate viewpoints. This approach deepens your understanding of the issues and also stimulates you to evaluate critically your beliefs.



Thinking Activity 2.5

ANALYZING A BELIEF FROM DIFFERENT PERSPECTIVES

Describe a belief of yours about which you feel very strongly. Then explain the reasons or experiences that led you to this belief. Next, describe a point of view that *conflicts* with your belief. Identify some of the reasons why someone might hold this belief.

ONLINE RESOURCES

Visit the student website for *Thinking Critically* at college.hmco.com/pic/chaffeetc9e for a sample student response to Thinking Activity 2.5.

Being open to new ideas and different viewpoints means being *flexible* enough to modify your ideas in the light of new information or better insight. Each of us has a tendency to cling to the beliefs we have been brought up with and the conclusions we have arrived at. If we are going to continue to grow and develop as thinkers, we have to modify our beliefs when evidence suggests that we should. As critical thinkers, we have to be *open* to receiving this new evidence and *flexible* enough to change and modify our ideas on the basis of it.

In contrast to open and flexible thinking, *uncritical* thinking tends to be one-sided and close-minded. People who think this way are convinced that they alone see things as they really are and that everyone who disagrees with them is wrong. The words we use to describe this type of person include “dogmatic,” “subjective,” and “egocentric.” It is very difficult for such people to step outside their own viewpoints in order to see things from other people’s perspectives.



Thinking Activity 2.6

WRITING FROM INTERACTIVE PERSPECTIVES*

Think of a well-known person, either historical (e.g., Socrates) or contemporary (e.g., Oprah Winfrey), and identify different perspectives from which that person can be viewed. For example, consider viewing Oprah Winfrey as a(n):

- pop culture icon.
- black activist.
- wealthy celebrity.
- self-help guru.
- actress.

Next, select two perspectives from the ones you identified and, using research, provide an explanatory background for each perspective. Then, through investigative

* This activity was developed by Frank Juszcyk.

analysis, describe the interactive relationship between the two perspectives, the basis on which they interact, and the ways in which each supports the other. Finally, in a summary conclusion to your findings, assess the significance of the two perspectives for contemporary thought.

Supporting Diverse Perspectives with Reasons and Evidence

When you are thinking critically, you can give sound and relevant reasons to back up your ideas. It is not enough simply to take a position on an issue or make a claim; we have to *back up our views* with other information that we feel supports our position. There is an important distinction as well as a relationship between *what* you believe and *why* you believe it.

If someone questions why you see an issue the way you do, you probably respond by giving reasons or arguments you feel support your belief. For example, consider the issue of whether using a cell phone while driving should be prohibited. As a critical thinker trying to make sense of this issue, you *should* attempt to identify not just the reasons that support your view but also the reasons that support other views. The following are reasons that support each view of this issue.

Issue:

Cell phone use while driving should be prohibited.

Cell phone use while driving should be permitted.

Supporting reasons:

1. Studies show that using cell phones while driving increases accidents.

Supporting reasons:

1. Many people feel that cell phones are no more distracting than other common activities in cars.

Now see if you can identify additional supporting reasons for each of these views on cell phone use while driving.

Supporting reasons:

2.
3.
4.

Supporting reasons:

2.
3.
4.

Seeing all sides of an issue combines two critical-thinking abilities:

- Viewing issues from different perspectives
- Supporting diverse viewpoints with reasons and evidence

Combining these two abilities enables you not only to understand other sides of an issue but also to understand *why* these views are held.



Visual Thinking

“You Leave—I Was Here First!”

Critical thinkers actively try to view issues from different perspectives. Why would someone take the position “Let’s get rid of illegal immigrants in America”? How would Native Americans view the person making that statement? What is your perspective on illegal immigrants in this country? Why?



Thinking Activity 2.7

ANALYZING DIFFERENT SIDES OF AN ISSUE

For each of the following issues, identify reasons that support each side of the issue.

Issue:

1. Multiple-choice and true/false exams should be given in college-level courses.

Multiple-choice and true/false exams should not be given in college-level courses.

Issue:

2. Immigration quotas should be reduced.

Immigration quotas should be increased.

Issue:

3. The best way to deal with crime is to give long prison sentences.

Long prison sentences will not reduce crime.

Issue:

4. When a couple divorces, the children should choose the parent with whom they wish to live.

When a couple divorces, the court should decide all custody issues regarding the children.



Thinking Activity 2.8

ANALYZING DIFFERENT PERSPECTIVES

Working to see different perspectives is crucial in helping you get a more complete understanding of the ideas being expressed in the passages you are reading. Read each of the following passages and then do the following:

1. Identify the main idea of the passage.
2. List the reasons that support the main idea.
3. Develop another view of the main issue.
4. List the reasons that support the other view.

ONLINE RESOURCES

Visit the student website for *Thinking Critically* at college.hmco.com/pic/chaffeetc9e for additional passages for analysis.

1. In a letter that has stunned many leading fertility specialists, the acting head of their professional society's ethics committee says it is sometimes acceptable for couples to choose the sex of their children by selecting either male or female embryos and discarding the rest. The group, the American Society of Reproductive Medicine, establishes positions on ethical issues, and most clinics say they abide by them. One fertility specialist, Dr. Norbet Gleicher, whose group has nine centers and who had asked for the opinion, was quick to act on it. "We will offer it immediately," Dr. Gleicher said of the sex-selection method. "Frankly, we have a list of patients who asked for it." Couples would have to undergo *in vitro* fertilization, and then their embryos would be examined in the first few days when they consisted of just eight cells. Leading fertility specialists said they were taken aback by the new letter and could hardly believe its message.

“What’s the next step?” asked Dr. William Schoolcraft. “As we learn more about genetics, do we reject kids who do not have superior intelligence or who don’t have the right color hair or eyes?” (*New York Times*, September 28, 2001).

2. When Dr. Hassan Abbass, a Veterans Affairs Department surgeon, and his wife arrived at the airport to leave for vacation last May 24, they were pulled aside and forced to submit to a careful search before boarding the plane. They became one of thousands of Americans of Middle Eastern heritage who have complained that a secretive and side-scale “profiling” system sponsored by the government and aimed at preventing air terrorism has caused them to be unfairly selected for extra scrutiny at airports. “Profiling” of this type is being used more frequently in many areas of law-enforcement, raising fundamental questions of how a free society balances security fears with civil liberties and the desire to avoid offensive stereotyping (*New York Times*, August 11, 1997).

Discussing Ideas in an Organized Way

Thinking critically often takes place in a social context. Although every person has his or her own perspective on the world, no single viewpoint is adequate for making sense of complex issues, situations, or even people. As we will see in the chapters ahead, we each have our own “lenses” through which we view the world—filters that shape, influence, and often distort the way we see things. The best way to expand our thinking and compensate for the bias that we all have is to be open to the viewpoints of others and willing to listen and to exchange ideas with them. This process of give and take, of advancing our views and considering those of others, is known as discussion. When we participate in a *discussion*, we are not simply talking; we are exchanging and exploring our ideas in an organized way.

Unfortunately, our conversations with other people about important topics are too often not productive exchanges. They often degenerate into name calling, shouting matches, or worse. Consider the following dialogue:

PERSON A: A friend of mine sent a humorous email in which he wrote about “killing the president.” He wasn’t serious, of course, but two days later the FBI showed up on his doorstep! This is no longer a free society—it’s a fascist regime!

PERSON B: Your friend’s an idiot and unpatriotic as well. You don’t kid about killing the president. Your friend is lucky he didn’t wind up in jail, where he deserves to be!

PERSON A: Since when is kidding around treason? With the way our freedoms are being stolen, we might as well be living in a dictatorship!

PERSON B: You’re friend isn’t the only idiot—you’re an idiot, too! You don’t deserve to live in America. It’s attitudes like yours that make terrorist attacks possible, like those against the World Trade Center and the Pentagon.

PERSON A: You’re calling me a terrorist? I can’t talk to a fascist like you!

PERSON B: And I can't talk to an unpatriotic traitor like you. America: Love it or leave it! Good-bye and good riddance!

If we examine the dynamics of this dialogue, we can see that the two people here are not really

- listening to each other.
- supporting their views with reasons and evidence.
- responding to the points being made.
- asking—and trying to answer—important questions.
- trying to increase their understanding rather than simply winning the argument.

In short, the people in this exchange are not *discussing* their views; they are simply *expressing* them, and each is trying to influence the other person into agreeing. Contrast this first dialogue with the following one. Although it begins the same way, it quickly takes a much different direction.

PERSON A: A friend of mine sent a humorous email in which he wrote about “killing the president.” He wasn't serious, of course, but two days later the FBI showed up on his doorstep! This is no longer a free society—it's a fascist regime!

PERSON B: Your friend's an idiot and unpatriotic as well. You don't kid about killing the president. Your friend is lucky he didn't wind up in jail, where he deserves to be!

PERSON A: Since when is kidding around treason? With the way our freedoms are being stolen, we're living in a repressive dictatorship!

PERSON B: Don't you think it's inappropriate to be talking about killing the president, even if you are kidding? And why do you think we're living in a repressive dictatorship?

PERSON A: Well, you're probably right that emailing a message like this isn't very intelligent, particularly considering the leaders who have been assassinated—John F. Kennedy and Martin Luther King, for example—and the terrorist attacks that we have suffered. But the only way FBI agents could have known about the email is if they are monitoring our private emails on an ongoing basis. Doesn't that concern you? It's like Big Brother is watching our every move and pouncing when we do something they think is wrong.

PERSON B: You're making a good point. It is a little unnerving to realize that our private conversations on the Internet may be monitored by the government. But doesn't it have to take measures like this in order to ensure we're safe? After all, remember the catastrophic attacks that destroyed the World Trade towers and part of the Pentagon, and the Oklahoma City bombing. If the government has to play the role of Big Brother to make sure we're safe, I think it's worth it.

PERSON A: I see what you're saying. But I think that the government has a tendency to go overboard if it's not held in check. Just consider the gigantic file the FBI

compiled on Martin Luther King and other peaceful leaders, based on illegal wiretaps and covert surveillance.

PERSON B: I certainly don't agree with those types of activities against peaceful citizens. But what about people who are genuine threats? Don't we have to let the government do whatever's necessary to identify and arrest them? After all, threatening to kill the president is like telling airport personnel that you have a bomb in your suitcase—it's not funny, even if you're not serious.

PERSON A: You're right: It's important for the government to do what's necessary to make sure we're as safe as possible from terrorist threats. But we can't give it a blank check to read our email, tap our phones, and infringe on our personal freedoms in other ways. After all, it's those freedoms that make America what it is.

PERSON B: Yes, I guess the goal is to strike the right balance between security and personal freedoms. How do we do that?

PERSON A: That's a very complicated question. Let's keep talking about it. Right now, though, I better get to class before my professor sends Big Brother to look for me!

How would you contrast the level of communication taking place in this dialogue with that in the first dialogue? What are the reasons for your conclusion?

Naturally, discussions are not always quite this organized and direct. Nevertheless, this second dialogue does provide a good model for what can take place in our everyday lives when we carefully explore an issue or a situation with someone else. Let us take a closer look at this discussion process.

Listening Carefully

Review the second dialogue and notice how each person in the discussion listens carefully to what the other person is saying and then tries to comment directly on what has just been said. When you are working hard at listening to others, you are trying to understand the point they are making and the reasons for it. This enables you to imagine yourself in their position and see things as they see them. Listening in this way often brings new ideas and different ways of viewing the situation to your attention that might never have occurred to you. An effective dialogue in this sense is like a game of tennis—you hit the ball to me, I return the ball to you, you return my return, and so on. The “ball” the discussants keep hitting back and forth is the subject they are gradually analyzing and exploring.

Supporting Views with Reasons and Evidence

Critical thinkers support their points of view with evidence and reasons and also develop an in-depth understanding of the evidence and reasons that support other viewpoints. Review the second dialogue and identify some of the reasons used by the participants to support their points of view. For example, Person B expresses the

view that the government may have to be proactive in terms of identifying terrorists and ensuring our security, citing as a reason the horrific consequences of terrorist attacks. Person A responds with the concern that the government sometimes goes overboard in situations like this, citing as a reason the FBI's extensive surveillance of Martin Luther King.

Responding to the Points Being Made

When people engage in effective dialogue, they listen carefully to the people speaking and then respond directly to the points being made instead of simply trying to make their own points. In the second dialogue, Person B responds to Person A's concern that "Big Brother is watching our every move" with the acknowledgment that "It is a little unnerving to realize that our private conversations on the Internet may be monitored by the government" and also with the question "But doesn't it have to take measures like this in order to ensure we're safe?" When you respond directly to other people's views, and they to yours, you extend and deepen the explorations into the issues, creating an ongoing, interactive discussion. Although people involved in the discussion may not ultimately agree, they should develop a more insightful understanding of the important issues and a greater appreciation of other viewpoints.

Asking Questions

Asking questions is one of the driving forces in your discussions with others. You can explore a subject first by raising important questions and then by trying to answer them together. This questioning process gradually reveals the various reasons and evidence that support each of the different viewpoints involved. For example, although the two dialogues begin the same way, the second dialogue moves in a completely different direction from that of the first when Person B poses the question "[W]hy do you think we're living in a repressive dictatorship?" Asking this question directs the discussion toward a mutual exploration of the issues and away from angry confrontation. Identify some of the other key questions that are posed in the dialogue.

A guide to the various types of questions that can be posed in exploring issues and situations begins on page 48 of this chapter.

Increasing Understanding

When we discuss subjects with others, we often begin by disagreeing. In an effective discussion, however, our main purpose should be to develop our understanding—not to prove ourselves right at any cost. If we are determined to prove that we are right, then we are not likely to be open to the ideas of others and to viewpoints that differ from our own. A much more productive approach is for all of the individuals involved to acknowledge that they are trying to achieve a clear and well-supported understanding of the subject being discussed, wherever their mutual analysis leads them.



Thinking Critically About Visuals

Complex Issues, Challenging Images

An American border patrol agent near Laredo, Texas, leads illegal immigrants from a mesquite forest. Immigrants who are caught illegally crossing the border between the United States and Mexico are often briefly detained and then sent back to Mexico. Others making the attempt to cross the border risk exploitation at the hands of “coyotes,” or immigrant smugglers; still more immigrants lose their lives to the extreme heat of the border climate.



Describe what is happening in this photograph. How does this particular image convey a story, or narrative, about what it is like to attempt an illegal border crossing? Is the photograph completely objective, or does it inspire some sort of emotion or reaction in you? (The photograph was taken by a professional journalist.) If so, explain what that reaction is—and how this photograph could be used to illustrate a particular argument about (or perspective on) immigration.

Army Pfc. Diego Rincon was killed in the Iraq War in 2003. Rincon, who was born in Columbia, was granted American citizenship status posthumously. Here, his father, Jorge Rincon, consoles Diego's girlfriend, Catherine Montemayor, following a news conference announcing the conferring of citizenship.



What does this photograph imply about American immigration policies? Does it complement, or contradict, the story told in the photograph on the facing page? Think about the way this photograph is composed. What element has the photographer featured most prominently? How does the composition of this photograph influence your thoughts about the issue of immigration?

Imagine that instead of ending, the second dialogue had continued for a while. Create responses that expand the exploration of the ideas being examined, and be sure to keep the guidelines for effective discussions in mind as you continue the dialogue.

PERSON B: Yes, I guess the goal is to strike the right balance between security and personal freedoms. But how do we do that? (and so on)



Thinking Activity 2.9

CREATING A DIALOGUE

Select an important social issue and write a dialogue that analyzes the issue from two different perspectives. As you write your dialogue, keep in mind the qualities of effective discussion: listening carefully to the other person and trying to comment directly on what has been said, asking and trying to answer important questions about the subject, and trying to develop a fuller understanding of the subject instead of simply trying to prove yourself right.

After completing your dialogue, read it to the class (with a classmate as a partner). Analyze the class members' dialogues by using the criteria for effective discussions that we have examined.

ONLINE RESOURCES

Visit the student website for *Thinking Critically* at college.hmco.com/pic/chaffeetc9e for sample student dialogues from Thinking Activity 2.9.

Becoming a Critical Thinker

In this chapter we have discovered that critical thinking is a total approach to the way we make sense of the world that involves an integrated set of thinking abilities and attitudes:

- *Thinking actively* by using our intelligence, knowledge, and skills to question, explore, and deal effectively with ourselves, others, and life's situations
- *Carefully exploring situations* by asking—and trying to answer—relevant questions at every level of cognitive complexity
- *Thinking independently* by carefully examining various ideas and arriving at our own thoughtful conclusions
- *Viewing situations from different perspectives* to develop an in-depth, comprehensive understanding and *supporting viewpoints with reasons and evidence* to arrive at thoughtful, well-substantiated conclusions
- *Discussing ideas in an organized way* in order to exchange and explore ideas with others

These critical-thinking qualities are a combination of cognitive abilities, basic attitudes, and thinking strategies that enable you to clarify and improve your

understanding of the world. Becoming a critical thinker is a lifelong process. Developing the thinking abilities needed to understand the complex world you live in and to make informed decisions requires ongoing analysis, reflection, and practice. Critical thinkers are better equipped to deal with the difficult challenges that life poses: to solve problems, to establish and achieve goals, and to make sense of complex issues. Let's now take these critical-thinking abilities that we have been exploring and apply them to a real-world example—the trial of a young mother accused of murdering her baby.

Analyzing Issues

We live in a complex world filled with challenging and often perplexing issues that we are expected to make sense of. For example, the media inform us every day of issues related to abortion, AIDS, terrorism, animal experimentation, budget priorities, child custody, crime and punishment, drugs, environmental pollution, global warming, genetic engineering, human rights, individual rights, international conflicts, moral values, pornography, poverty, racism, reproductive technology, the right to die, sex education, and many others. Often these broad social issues intrude into our own personal lives, taking them from the level of abstract discussion into our immediate experience. As effective thinkers, we have an obligation to develop informed, intelligent opinions about these issues so that we can function as responsible citizens and also make appropriate decisions when confronted with these issues in our lives.

Almost everyone has opinions about these and other issues. Some opinions, however, are more informed and well supported than others. To make sense of complex issues, we need to bring to them a certain amount of background knowledge and an integrated set of thinking and language abilities.

What Is the Issue?

Many social issues are explored, analyzed, and evaluated through our judicial system. Imagine that you have been called for jury duty and subsequently impaneled on a jury that is asked to render a verdict on the following situation. (*Note:* This fictional case is based on an actual case that was tried in May 1990 in Minneapolis, Minnesota.)

On January 23, the defendant, Mary Barnett, left Chicago to visit her fiancé in San Francisco. She left her six-month-old daughter, Alison, unattended in the apartment. Seven days later, Mary Barnett returned home to discover that her baby had died of dehydration. She called the police and initially told them that she had left the child with a baby sitter. She later stated that she knew she had left the baby behind, that she did not intend to come back, and that she knew Alison would die in a day or two. She has been charged with the crime of second-degree murder: intentional murder without premeditation. If convicted, she could face up to eighteen years in prison.

As a member of the jury, your role is to hear and weigh the evidence, evaluate the credibility of the witnesses, analyze the arguments presented by the prosecution

and defense, determine whether the law applies specifically to this situation, and render a verdict on the guilt or innocence of the defendant. To perform these tasks with clarity and fairness, you will have to use a variety of sophisticated thinking and language abilities. To begin with, describe your initial assessment of whether the defendant is innocent or guilty and explain your reasons for thinking so.

As part of the jury selection process, you are asked by the prosecutor and defense attorney whether you will be able to set aside your initial reactions or preconceptions to render an impartial verdict. Identify any ideas or feelings related to this case that might make it difficult for you to view it objectively. Are you a parent? Have you ever had any experiences related to the issues in this case? Do you have any preconceived views concerning individual responsibility in situations like this? Then evaluate whether you will be able to go beyond your initial reactions to see the situation objectively, and explain how you intend to accomplish this.

What Is the Evidence?

The evidence at judicial trials is presented through the testimony of witnesses called by the prosecution and the defense. As a juror, your job is to absorb the information being presented, evaluate its accuracy, and assess the reliability of the individuals giving the testimony. The following are excerpts of testimony from some of the witnesses at the trial. Witnesses for the prosecution are presented first, followed by witnesses for the defense.

CAROLINE HOSPERS: On the evening of January 30, I was in the hallway when Mary Barnett entered the building. She looked distraught and didn't have her baby Alison with her. A little while later the police arrived and I discovered that she had left poor little Alison all alone to die. I'm not surprised this happened. I always thought that Ms. Barnett was a disgrace—I mean, she didn't have a husband. In fact, she didn't even have a steady man after that sailor left for California. She had lots of wild parties in her apartment, and that baby wasn't taken care of properly. Her garbage was always filled with empty whiskey and wine bottles. I'm sure that she went to California just to party and have a good time, and didn't give a damn about little Alison. She was thinking only of herself. It's obvious that she is entirely irresponsible and was not a fit mother.

OFFICER MITCHELL: We were called to the defendant's apartment at 11 P.M. on January 30 by the defendant, Mary Barnett. Upon entering the apartment, we found the defendant holding the deceased child in her arms. She was sobbing and was obviously extremely upset. She stated that she had left the deceased with a baby sitter one week before when she went to California, and had just returned to discover the deceased alone in the apartment. When I asked the defendant to explain in detail what had happened before she left, she stated: "I remember making airline reservations for my trip. Then I tried to find a baby sitter, but I couldn't. I knew that I was leaving Alison alone and that I wouldn't be back for a while, but I had to get to California at all costs. I visited my mother and then left." An autopsy was later performed that determined that the deceased had

died of dehydration several days earlier. There were no other marks or bruises on the deceased.

DR. PARKER: I am a professional psychiatrist who has been involved in many judicial hearings on whether a defendant is mentally competent to stand trial, and I am familiar with these legal tests. At the request of the district attorney's office, I interviewed the defendant four times during the last three months. Ms. Barnett is suffering from depression and anxiety, possibly induced by the guilt she feels for what she did. These symptoms can be controlled with proper medication. Based on my interview, I believe that Ms. Barnett is competent to stand trial. She understands the charges against her, and the roles of her attorney, the prosecutor, the judge and jury, and can participate in her own defense. Further, I believe that she was mentally competent on January 23, when she left her child unattended. In my opinion she knew what she was doing and what the consequences of her actions would be. She was aware that she was leaving her child unattended and that the child would be in great danger. I think that she feels guilty for the decisions she made, and that this remorse accounts for her current emotional problems.

To be effective critical thinkers, we need to try to determine the accuracy of the information and evaluate the credibility of the people providing the information. Evaluate the credibility of the prosecution witnesses by identifying those factors that led you to believe their testimony and those factors that raised questions in your mind about the accuracy of the information presented. Use these questions to guide your evaluation:

- What information is the witness providing?
- Is the information relevant to the charges?
- Is the witness credible? What biases might influence the witness's testimony?
- To what extent is the testimony accurate?

Based on the testimony you have heard up to this point, do you think the defendant is innocent or guilty of intentional murder without premeditation? Explain the reasons for your conclusion.

Now let's review testimony from the witnesses for the defense.

ALICE JONES: I have known the defendant, Mary Barnett, for over eight years. She is a very sweet and decent woman, and a wonderful mother. Being a single parent isn't easy, and Mary has done as good a job as she could. But shortly after Alison's birth, Mary got depressed. Then her fiancé, Tim Stewart, was transferred to California. He's a navy engine mechanic. She started drinking to overcome her depression, but this just made things worse. She began to feel trapped in her apartment with little help raising the baby and few contacts with her family or friends. As her depression deepened, she clung more closely to Tim, who as a result became more distant and put off their wedding, which caused her to feel increasingly anxious and desperate. She felt that she had to go to California to get things straightened out, and by the time she reached that point I think she had lost touch with reality. I honestly don't think she realized that she was leaving Alison unattended. She loved her so much.

DR. BLOOM: Although I have not been involved in judicial hearings of this type, Mary Barnett has been my patient, twice a week for the last four months, beginning two months after she returned from California and was arrested. In my professional opinion, she is mentally ill and not capable of standing trial. Further, she was clearly not aware of what she was doing when she left Alison unattended and should not be held responsible for her action. Ms. Barnett's problems began after the birth of Alison. She became caught in the grip of the medical condition known as postpartum depression, a syndrome that affects many women after the birth of their children, some more severely than others. Women feel a loss of purpose, a sense of hopelessness, and a deep depression. The extreme pressures of caring for an infant create additional anxiety. When Ms. Barnett's fiancé left for California, she felt completely overwhelmed by her circumstances. She turned to alcohol to raise her spirits, but this just exacerbated her condition. Depressed, desperate, anxious, and alcoholic, she lapsed into a serious neurotic state and became obsessed with the idea of reaching her fiancé in California. This single hope was the only thing she could focus on, and when she acted on it she was completely unaware that she was putting her daughter in danger. Since the trial has begun, she has suffered two anxiety attacks, the more severe resulting in a near-catatonic state necessitating her hospitalization for several days. This woman is emotionally disturbed. She needs professional help, not punishment.

MARY BARNETT: I don't remember leaving Alison alone. I would never have done that if I had realized what I was doing. I don't remember saying any of the things that they said I said, about knowing I was leaving her. I have tried to put the pieces together through the entire investigation, and I just can't do it. I was anxious, and I was real frightened. I didn't feel like I was in control, and it felt like it was getting worse. The world was closing in on me, and I had nowhere to turn. I knew that I had to get to Tim, in California, and that he would be able to fix everything. He was always the one I went to, because I trusted him. I must have assumed that someone was taking care of Alison, my sweet baby. When I was in California, I knew something wasn't right. I just didn't know what it was.

Based on this new testimony, do you think that the defendant is innocent or guilty of intentional murder without premeditation? Have your views changed? Explain the reasons for your current conclusion. Evaluate the credibility of the defense witnesses by identifying those factors that led you to believe their testimony and those factors that raised questions in your mind about the accuracy of the information being presented. Use the questions on page 67 as a guide.

What Are the Arguments?

After the various witnesses present their testimony through examination and cross-examination questioning, the prosecution and defense then present their final arguments and summations. The purpose of this phase of the trial is to tie together—or

raise doubts about—the evidence that has been presented in order to persuade the jury that the defendant is guilty or innocent. Included here are excerpts from these final arguments.

PROSECUTION ARGUMENTS: Child abuse and neglect are a national tragedy. Every day thousands of innocent children are neglected, abused, and even killed. The parents responsible for these crimes are rarely brought to justice because their victims are usually not able to speak on their own behalf. In some sense, all of these abusers are emotionally disturbed because it takes emotionally disturbed people to torture, maim, and kill innocent children. But these people are also responsible for their actions and they should be punished accordingly. They don't have to hurt these children. No one is forcing them to hurt these children. They can choose not to hurt these children. If they have emotional problems, they can choose to seek professional help. Saying you hurt a child because you have "emotional problems" is the worst kind of excuse.

The defendant, Mary Barnett, claims that she left her child unattended, to die, because she has "emotional problems" and that she is not responsible for what she did. This is absurd. Mary Barnett is a self-centered, irresponsible, manipulative, deceitful mother who abandoned her six-month-old daughter to die so that she could fly to San Francisco to party all week with her fiancé. She was conscious, she was thinking, she knew exactly what she was doing, and that's exactly what she told the police when she returned from her little pleasure trip. Now she claims that she can't remember making these admissions to the police, nor can she remember leaving little Alison alone to die. How convenient!

You have heard testimony from her neighbor, Caroline Hospers, that she was considerably less than an ideal mother: a chronic drinker who liked to party rather than devoting herself to her child. You have also heard the testimony of Dr. Parker, who stated that Mary Barnett was aware of what she was doing on the fateful day in January and that any emotional disturbance is the result of her feelings of guilt over the terrible thing she did, and her fear of being punished for it.

Mary Barnett is guilty of murder, pure and simple, and it is imperative that you find her so. We need to let society know that it is no longer open season on our children.

After reviewing the prosecution's arguments, describe those points you find most persuasive and those you find least persuasive, and then review the defense arguments that follow.

DEFENSE ARGUMENTS: The district attorney is certainly correct—child abuse is a national tragedy. Mary Barnett, however, is not a child abuser. You heard the police testify that the hospital found no marks, bruises, or other indications of an abused child. You also heard her friend, Alice Jones, testify that Mary was a kind and loving mother who adored her child. But if Mary Barnett was not a child abuser, then how could she have left her child unattended? Because she had snapped psychologically. The combination of postpartum depression, alcoholism,

the pressures of being a single parent, and the loss of her fiancé were too much for her to bear. She simply broke under the weight of all that despair and took off blindly for California, hoping to find a way out of her personal hell. How could she leave Alison unattended? Because she was completely unaware that she was doing so. She had lost touch with reality and had no idea what was happening around her.

You have heard the in-depth testimony of Dr. Bloom, who has explained to you the medical condition of postpartum depression and how this led to Mary's emotional breakdown. You are aware that Mary has had two severe anxiety attacks while this trial has taken place, one resulting in her hospitalization. And you have seen her desperate sobbing whenever her daughter Alison has been mentioned in testimony.

Alison Barnett is a victim. But she is not a victim of intentional malice from the mother who loves her. She is the victim of Mary's mental illness, of her emotional breakdown. And in this sense Mary is a victim also. In this enlightened society we should not punish someone who has fallen victim to mental illness. To do so would make us no better than those societies who used to torture and burn mentally ill people whom they thought were possessed by the devil. Mary needs treatment, not blind vengeance.

After reviewing the arguments presented by the defense, identify those points you find most persuasive and those you find least persuasive.

What Is the Verdict?

Following the final arguments and summations, the judge sometimes gives the jury specific instructions to clarify the issues to be considered. In this case the judge reminds the jury that they must focus on the boundaries of the law and determine whether the case falls within these boundaries or outside them. The jury then retires to deliberate the case and render a verdict.

For a defendant to be found guilty of second-degree murder, the prosecution must prove that he or she intended to kill someone, made a conscious decision to do so at that moment (without premeditation), and was aware of the consequences of his or her actions. In your discussion with the other jurors, you must determine whether the evidence indicates, beyond a reasonable doubt, that the defendant's conduct in this case meets these conditions. What does the qualification "beyond a reasonable doubt" mean? A principle like this is always difficult to define in specific terms, but in general the principle means that it would not make good sense for thoughtful men and women to conclude otherwise.

Based on your analysis of the evidence and arguments presented in this case, describe what you think the verdict ought to be and explain your reasons for thinking so.

Verdict: Guilty _____

Not Guilty _____



Thinking Activity 2.10

ANALYZING YOUR VERDICT

Exploring this activity has given you the opportunity to analyze the key dimensions of a complex court case. Synthesize your thoughts regarding this case in a three- to five-page paper in which you explain the reasons and evidence that influenced your verdict. Be sure to discuss the important testimony and your evaluation of the credibility of the various witnesses.



Thinking Passages

JURORS' AND JUDGES' REASONING PROCESSES

The first of the following articles, “Jurors Hear Evidence and Turn It into Stories,” by Daniel Goleman, author of the best-selling book *Emotional Intelligence*, describes recent research that gives us insight into the way jurors think and reason during the process of reaching a verdict. The second article, “Judicial Reasoning Is All Too Human” by Patricia Cohen, sheds light on the reasoning processes—and potential biases—of judges in court proceedings. As you read these articles, reflect on the reasoning process you engaged in while thinking about the Mary Barnett case, and then answer the questions found at the end of the articles.

Jurors Hear Evidence and Turn It into Stories

by DANIEL GOLEMAN

Studies Show They Arrange Details to Reflect Their Beliefs

Despite the furor over the verdict in the Rodney G. King beating case, scientists who study juries say the system is by and large sound. Many also believe that it is susceptible to manipulation and bias, and could be improved in various specific ways suggested by their research findings.

If there is any lesson to be learned from the research findings, it is that juries are susceptible to influence at virtually every point, from the moment members are selected to final deliberation.

Much of the newest research on the mind of the juror focuses on the stories that jurors tell themselves to understand the mounds of disconnected evidence, often presented in a confusing order. The research suggests that jurors' unspoken assumptions about human nature play a powerful role in their verdicts.

“People don't listen to all the evidence and then weigh it at the end,” said Dr. Nancy Pennington, a psychologist at the University of Colorado. “They

Source: “Jurors Hear Evidence and Turn It into Stories,” by Daniel Goleman, *The New York Times*, May 12, 1992. Copyright © 1992 by The New York Times Co. Reprinted by permission.



Visual Thinking

“Members of the Jury, Don’t Be Deceived . . .”

Courtroom dramas, like that depicted in this photo, provide rich contexts for sophisticated critical thinking. What crime do you think the defendant (in the witness chair) might have been charged with? Do you have any positive or negative bias toward him based on his appearance and facial expression? Do you think the woman addressing the jury is the prosecutor or defense attorney? Why?



process it as they go along, composing a continuing story throughout the trial that makes sense of what they’re hearing.”

That task is made difficult by the way evidence is presented in most trials, in an order dictated for legal reasons rather than logical ones. Thus, in a murder trial, the first witness is often a coroner, who establishes that a death occurred.

“Jurors have little or nothing to tie such facts to, unless an attorney suggested an interpretation in the opening statement,” in the form of a story line to follow, Dr. Pennington said.

In an article in the November 1991 issue of *Cardozo Law Review*, Dr. Pennington, with Dr. Reid Hastie, also a psychologist at the University of Colorado, reported a series of experiments that show just how important jurors’ stories are in determining the verdict they come to. In the studies, people called for jury duty but not involved in a trial were recruited for a simulation in which they were to act as jurors for a murder trial realistically reenacted on film.

In the case, the defendant, Frank Johnson, had quarreled in a bar with the victim, Alan Caldwell, who threatened him with a razor. Later that evening they went outside, got into a fight, and Johnson knifed Caldwell, who died. Disputed points included whether or not Caldwell was a bully who had started the first quarrel when his girlfriend had asked Johnson for a ride to the racetrack, whether Johnson had stabbed Caldwell or merely held his knife out to protect himself, and whether Johnson had gone home to get a knife.

In detailed interviews of the jurors, Dr. Pennington found that in explaining how they had reached their verdicts, 45 percent of the references they made were to events that had not been included in the courtroom testimony. These included inferences about the men's motives and psychological states, and assumptions the jurors themselves brought to the story from their own experience.

The stories that jurors told themselves pieced together the evidence in ways that could lead to opposite verdicts. One common story among the jurors, which led to a verdict of first-degree murder, was that the threat with the razor by Caldwell had so enraged Johnson that he went home to get his knife—a point that was in dispute—with the intention of picking a fight, during which he stabbed him to death.

By contrast, just as many jurors told themselves a story that led them to a verdict of not guilty: Caldwell started the fight with Johnson and threatened him with a razor, and Caldwell ran into the knife that Johnson was using to protect himself.

Role of Jurors' Backgrounds

The study found that jurors' backgrounds could lead to crucial differences in the assumptions they brought to their explanatory stories. Middle-class jurors were more likely to find the defendant guilty than were working-class jurors. The difference mainly hinged on how they interpreted the fact that Johnson had a knife with him during the struggle.

Middle-class jurors constructed stories that saw Johnson's having a knife as strong evidence that he planned a murderous assault on Caldwell in their second confrontation. But working-class jurors said it was likely that a man like Johnson would be in the habit of carrying a knife with him for protection, and so they saw nothing incriminating about his having the knife.

"Winning the battle of stories in the opening statements may help determine what evidence is attended to, how it is interpreted, and what is recalled both during and after the trial," Dr. Richard Lempert, a psychologist at the University of Michigan Law School, wrote in commenting on Dr. Pennington's article.

Verdicts that do not correspond to one's own "story" of a case are shocking. In the King case, "We didn't hear the defense story of what was going on, but only saw the strongest piece of the prosecution's evidence, the videotape," said Dr. Stephen Penrod, a psychologist at the University of Minnesota Law School. "If we had heard the defense theory, we may not have been so astonished by the verdict."

In the contest among jurors to recruit fellow members to one or another version of what happened, strong voices play a disproportionate role. Most juries include some people who virtually never speak up, and a small number who dominate the discussion, typically jurors of higher social status, according to studies reviewed in *Judging the Jury* (Plenum Press, 1986) by two psychologists, Dr. Valerie Hans of the University of Delaware and Dr. Neil Vidmar of Duke University.

The research also reveals that “juries are more often merciful to criminal defendants” than judges in the same cases would be, said Dr. Hans.

Blaming the Victim

In recent research, Dr. Hans interviewed 269 jurors in civil cases and found that many tended to focus on the ability of victims to have avoided being injured. “You see the same kind of blaming the victim in rape cases, too, especially among female jurors,” Dr. Hans said. “Blaming the victim is reassuring to jurors because if victims are responsible for the harm that befell them, then you don’t have to worry about becoming a victim yourself because you know what to do to avoid it.”

That tendency may have been at work among the King jurors, Dr. Hans said, “when the jurors said King was in control and that if he stopped moving the police would have stopped beating him.”

“Of course, the more they saw King as responsible for what happened, the less the officers were to blame in their minds,” Dr. Hans said.

Perhaps the most intensive research has focused on the selection of a jury. Since lawyers can reject a certain number of prospective jurors during jury selection without having to give a specific reason, the contest to win the mind of the jury begins with the battle to determine who is and is not on the jury.

The scientific selection of juries began in the early 1970s when social scientists volunteered their services for the defense in a series of political trials, including proceedings arising from the 1971 Attica prison uprising in upstate New York. One method used was to poll the community where the trial was to be held to search for clues to attitudes that might work against the defendant, which the defense lawyers could then use to eliminate jurors.

For example, several studies have shown that people who favor the death penalty are generally pro-prosecution in criminal cases, and so more likely to convict a defendant. Defense lawyers can ask prospective jurors their views on the death penalty, and eliminate those who favor it.

On the basis of such a community survey for a trial in Miami, Dr. Elizabeth Loftus, a psychologist at the University of Washington, found that as a group, whites trust the honesty and fairness of the police far more than blacks. “If you knew nothing else, you’d use that demographic variable in picking a jury in the King case,” she said. “But in Ventura County, there’s a jury pool with almost no blacks. It was a gift to the defense, in retrospect.”

Over the last two decades, such methods have been refined to the point that 300 or more consulting groups now advise lawyers on jury selection.

Judicial Reasoning Is All Too Human

by PATRICIA COHEN

Forget the 14th Amendment and the peculiarities of California state law. The real inspiration behind Supreme Court Justice Antonin Scalia's vote to deny the child of an adulterous affair any contact with her natural father was the legend of King Arthur, Guinevere and Lancelot.

At least that's the way Anthony Amsterdam, a lawyer, and Jerome Bruner, a psychologist, see it. "Much judicial decision-making is driven by psychological processes," Mr. Amsterdam said, and "literature enters powerfully into cultural psychology."

So if you want to understand adultery, don't look merely at legal statutes, the two scholars insist. Examine a culture's narrative tradition, what psychologists call its "mythic patterns." Only then, they argue in their provocative book *Minding the Law* (Harvard University Press), can one "fully appreciate the power of the Guinevere legend in shaping Justice Scalia's portrayal of adultery."

In other words, stories are how we all make sense of marriage and fidelity, death and betrayal, accomplishment and revenge; how Iago eggs Othello to murder and how Tony Soprano can describe himself as a "captain-of-industry type" instead of a mob boss; how you decide whether a giant computer corporation is an unethical shark or simply a fierce competitor, and whether a mayor who wants to divorce his wife is a cheating cad or a henpecked husband.

Stories, and the way judges—intentionally or not—categorize and spin them, are as responsible for legal rulings as logic and precedent, Mr. Amsterdam and Mr. Bruner said. Their novel attempt to reach into the psyche of Justice Scalia and other members of the Supreme Court is part of a growing interest in a long-neglected and cryptic subject: the psychology of judicial decision-making.

"The most exciting work in law schools right now is to try to bring an understanding of how people actually think in contact with the law," said Cass Sunstein, a law professor at the University of Chicago Law School and the editor of *Behavioral Economics and the Law* (Cambridge University Press, 2000). "It is just starting."

Of course, legal scholars have long recognized that the law is more than an antiseptic collection of rules, precedents and procedures that stand apart from the larger world of politics, culture, self-interest and morality. In the 1920's and 30's, the legal realists argued that people should pay attention to the social context of the law as well as human psychology. No one should assume that decisions are entirely rational, Jerome Frank declared in his seminal 1930 study, *Law and the Modern Mind*, because of the simple fact that "judges are human." But while the psychology of juries has been extensively studied, little research has been done on the psychology of judges.

Source: Patricia Cohen, "Judicial Reasoning Is All Too Human," *The New York Times*, June 30, 2001. Copyright © 2001 by The New York Times Co. Reprinted by permission.

“Judges are hard to study,” said Stephan Landsman, a law professor at DePaul College of Law in Chicago. “We’ve had very few opportunities to ask them the sort of questions that we ask juries” all the time.

Not only are judges reluctant to participate in studies, he said, but few legal scholars have the necessary training to do this kind of research.

Jeffrey J. Rachlinski, a psychologist and law professor at Cornell Law School, is one who does. Working with Chris Guthrie, a law professor at the University of Missouri School of Law, and Judge Andrew J. Wistrich, a federal district judge in California, Mr. Rachlinski managed to corral 167 federal magistrate judges and convince them to answer a questionnaire intended to detect five common “cognitive illusions” or mental shortcuts, like perceiving past events to be more predictable than they actually were and overestimating their own ability. (A common example of this bias is a husband’s estimate of how much housework he does; in this case, judges were asked to estimate whether they were overturned on appeal more or less frequently than their colleagues.) Do even highly trained judges suffer from the sort of psychological quirks that distort decision-making?

Although the judges were somewhat less susceptible to two of the five, these psychological illusions caused them to err again and again. As the authors wrote in the *Cornell Law Review* [in May 2001], “Wholly apart from political orientation and self-interest, the very nature of human thought can mislead judges confronted by particular types of situations into making consistent and predictable mistakes.”

Yet the legal system takes no account of such mental mechanisms. Indeed, it assumes that judges, with their specialized training and their mastery of the rules of evidence, are much better equipped than jurors to put aside emotion and ignore evidence that might bias a decision. But are they?

In an early study on the subject, Mr. Landsman teamed up with a psychologist, Richard F. Rakos, in 1992 to test whether a group of Ohio judges could discount what they knew to be inadmissible information—like a defendant’s prior conviction. It turned out they couldn’t. Those who heard information that reflected badly on the defendant—but that the law says should be ignored—ended up voting against the defendant; judges who didn’t hear it ruled the other way. Judges “make decisions in the same way that other people make decisions,” Mr. Landsman said, but “getting that idea out and following up its implications has been very difficult because it threatens a judge’s claim of authority and trustworthiness.”

Rather than try to set up scientifically controlled experiments, Theodore Eisenberg, a law professor at Cornell Law School, looks to the real world, studying thousands of actual cases in an effort to discover how judges reach their decisions. He has examined whether juries are a softer touch than judges in product liability cases (they’re not), and why bankruptcy judges think they rule more quickly than they actually do (they suffer from self-serving bias—just like everyone else). But such research is particularly tough to do, Mr. Eisenberg said, because of the way legal databases are organized.

Whatever the experimental design, “the pattern across all of these studies is strikingly consistent,” writes Shari Seidman Diamond, a law professor and psychologist at Northwestern University Law School, who has reviewed what research there is for a forthcoming book. “Judges as well as laypersons are influenced by these cognitive biases.”

Mr. Amsterdam and Mr. Bruner agree with that conclusion, although they take a more, well, idiosyncratic route to it. For more than 35 years, Mr. Amsterdam has been one of the country’s leading capital defense lawyers; the man who persuaded the Supreme Court in 1972 to ban capital punishment on the ground that it was being arbitrarily administered. (The ban was lifted in 1976.) Mr. Bruner is considered a founder of cognitive psychology; after doing research on infant learning, he helped establish the nation’s Head Start program.

Taking a page from Jungian and some cognitive psychologists, Mr. Bruner and Mr. Amsterdam believe that archetypal stories or myths unconsciously give shape to people’s perceptions of their own lives. Universal themes and characters offer a kind of rough script or road map for today’s bankers and janitors, salesclerks and toll collectors. As Joseph Campbell wrote in his 1949 classic, *The Hero with a Thousand Faces*, “The latest incarnation of Oedipus, the continued romance of Beauty and the Beast, stands this afternoon on the corner of 42d Street and Fifth Avenue, waiting for the traffic light to change.”

They also sit in the witness box, at the defense and plaintiff tables, and in the judge’s chair, Mr. Amsterdam and Mr. Bruner say.

Consider the 1989 adultery case, *Michael H. v. Gerald D.* Michael went to court to get permission to see his biological daughter Victoria, who was born during an on-and-off, six-year affair with Carole. Carole and her husband, Gerald, fought the request and the case worked its way up to the Supreme Court, where Michael lost, 5 to 4.

Justice Scalia wrote the majority opinion, and to the professors’ ears, it retells an ancient combat myth that serves as the basis for the legend of King Arthur, Queen Guinevere and Lancelot, a tale of a married woman who is carried off by a ravisher and ultimately rescued by her husband. Justice Scalia presents the case, Mr. Amsterdam and Mr. Bruner contend, as a “winner-take-all struggle” in which the adulterous villain must be punished and the “sanctity” of the family restored. They dissect the opinion to show, for example, how Justice Scalia narrowly defines the category of “family” to mean only one father sanctioned by marriage, not two even if the second is the biological father. Then, they add, he artfully uses rhetoric—for example, talking about what “Nature requires”—to make any other definition of family, or any compromise that would take account of both fathers’ rights, appear unnatural.

Richard A. Posner, chief judge for the United States Circuit Court of Appeals in Chicago, thinks much of Mr. Amsterdam and Mr. Bruner’s analysis is hogwash. The topic is important, said Judge Posner, who wrote about psychology and the

law in his recent book, *Frontiers of Legal Theory*, but he doubts whether “cognitive psychology or even rational choice theory has the tools to make much progress in the understanding of judicial psychology.”

Yet even if it’s not clear precisely how judges are affected by these psychological biases, it is clear that they are affected, researchers argue, so adjust the system to correct for them. Consider having a panel instead of a single judge rule on cases, as is regularly done on the appellate level, Mr. Landsman suggests. Rely on juries because they can be shielded from unlawful evidence, Ms. Diamond argues. Set up rules of thumb or guidelines to limit unconscious bias, Mr. Rachlinski says. For instance, doctors cannot be found liable unless their care strays from an established customary standard.

The first hurdle is to get judges to admit they are subject to the same psychological hiccups as everyone else, the field’s pioneers say. Professionals can learn to adapt to cognitive biases, but only if they get constant feedback.

“Our whole book, in a sense, is a treatise for the proposition that judges have choices they do not acknowledge to themselves and the world,” Mr. Amsterdam said. “They make many decisions under the delusion that those results are foreordained by rules of reason, but they are not.”

That’s not too surprising. After all, they’re only human.

Questions for Analysis

1. Reflect on your own deliberations of the Mary Barnett case and describe the reasoning process you used to reach a verdict. Did you find that you were composing a continuing story to explain the testimony you were reading? If so, was this story changed or modified as you learned more information or discussed the case with your classmates?
2. Explain how factors from your own personal experience (age, gender, experience with children, and so on) may have influenced your verdict and the reasoning process that led up to it.
3. Explain how your beliefs about human nature may have influenced your analysis of Mary Barnett’s motives and behavior.
4. Explain whether you believe that the research strategies lawyers are using to select the “right” jury for their cases are undermining the fairness of the justice system.
5. According to this article, judges are vulnerable to the same psychological influences, biases, and errors in reasoning as are jurors and the rest of the general population. To what five “cognitive illusions” are judges susceptible, as revealed in the research conducted by psychologist Jeffrey J. Rachlinski? Explain how cognitive illusions might play a role in determining the guilt or innocence of Mary Barnett.
6. Judges’ reasoning processes are also influenced by universal cultural themes and mythic patterns, according to Anthony Amsterdam and Jerome Bruner. Think of two different archetypal stories, fairy tales, or myths, and explain how these might influence a judge to find Mary Barnett guilty or innocent.