Critical Thinking and Communication

The Use of Reason in Argument

SEVENTH EDITION

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PEARSON

CRITICAL THINKING AND COMMUNICATION

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TO OUR MOTHERS

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PREFACE

The Seventh Edition of *Critical Thinking and Communication* reflects many current developments in the teaching and learning of argumentation. During the past five years, the field of argumentation has continued to adapt to the needs and interests of an increasingly diverse society and interconnected world. This edition highlights the importance of culturally sensitive and co-orientational forms of argument. Although we have continued to focus on a rhetorical perspective on argument, we do so in the context of building communities of advocates who accept culturally diverse worldviews and practices. More and more, the traditional tools of argumentation are used to build connections, unite people, and build peace.

NEW TO THIS EDITION

We incorporated these themes into this edition by revising and updating with the following features:

- Redesigned chapters in cultural and collaborative argumentation consider how students can adapt arguments to better align with hearers from diverse audiences. Focusing on understanding cultural needs and expectations, the text guides students through ways of designing and framing arguments that are appropriate to specific argument situations and expectations.
- New chapters and approaches for building and refuting extended argument cases develop a "co-orientational" approach. Using the "co-orientational" model, we explore strategies for conversational argumentation focusing on critical listening, analysis, and refutation.
- This edition integrates opportunities to "Apply the Theory" in each chapter. We integrate process-based exercises with chapter discussions to provide students with opportunities to practice argumentation skills and critical thinking processes as they read the theories.
- New chapters in persuasion and responsibility explore how students can design messages, enhance credibility, and present arguments ethically. These are the final two chapters in the text and serve to focus student argument skills into a framework that stresses the audience and ethical requirements when an advocate seeks to change argument recipients.
- New and revised argument case studies provide contemporary and "real" examples of how arguments and argumentation are used in fields ranging from law to politics to public protest. Each chapter begins with a case study that is integrated into the theoretical discussion in a way that explores how everyday arguments can be understood and critically analyzed.

■ New models, diagrams, and process illustrations were developed to better describe the flow and connections of theory to practice. These models provide a strong connection between the discussions in the text and ways of graphically understanding how argumentation theory can be applied.

TEXT STRUCTURE

The book is divided into four sections. The first section, Developing a Conceptual Framework for Argument, focuses on a conceptual framework for argument. Chapter 1 examines the relationship between argument and critical thought and explores how argumentation can improve the ability to examine complex issues. The chapter introduces two significant theoretical constructs that are used throughout the rest of the book: argument spheres and fields. Argument spheres are central to our understanding of how argument situations and contexts develop and can be used to adapt and analyze arguments. Argument fields provide us with a way of understanding the guiding rules and norms that can be used to shape arguments as well as criticize them. The second chapter introduces a co-orientational model of argument. It is developed along with traditional arguer-based models including formal logic and the Toulmin Model. Chapter 3 concludes the section with an exploration of how values and culture shape argument contexts. As the world becomes more interconnected, there is a greater need to develop cultural appreciation and sensitivity toward other approaches to argument. These concepts are explored along with the important role values and value systems play in how we understand and interact with arguments and cultures. It provides readers with approaches for understanding how to argue in value-rich and culturally diverse situations.

Section II, Parts, parses the argumentation model developed in the first section to examine how claims and propositions, evidence, and reasoning work together to form arguments. The chapters in this section consider the nature and function of each component, provide approaches for using these components to construct arguments, and then offer tests to ensure that each part is effectively designed. Chapter 4 looks at how claims and propositions can be developed, understood, and criticized. It introduces types of claims—fact, value, and policy—as well as a consideration of how they function in different argument spheres. Chapter 5 considers evidence and how claims are grounded. It provides readers with tools for understanding and analyzing evidence quality as well as how to identify improper evidence use. Chapter 6 surveys different approaches for reasoning and provides readers with tools for understanding, analyzing, and evaluating the quality of reasoning. Argument analysis and evaluation, themes developed in this section, are later used in Chapters 10 and 11 to help readers understand quality and ethical discourse.

The focus of Section III, Developing and Arguing Extended Cases, is how advocates can move from creating individual arguments to extended, well-developed argument cases. Chapter 7 considers the process and principles associated with analyzing and approaching propositions. It explores the unique questions associated with each type of proposition and introduces concepts related to proving propositions such as "presumption," "burden of proof," and creating "*prima facie*" cases. Chapter 8, then, develops these concepts further by examining how extended cases can be designed and argued. The stock issues associated with

each proposition type are discussed, as are strategies for designing extended cases. Chapter 9 looks at the other side of the proposition and surveys methods of refutation. Analytic strategies are developed for each type of proposition and provide advocates with tools for disproving extended cases as well as the assumptions of the propositional arena.

The final section, Communicating Arguments, is about how arguers move from the work of creating arguments and cases to the process of presenting them. Chapter 10 discusses persuasion and how the argument context serves as a rhetorical situation in which arguers and recipients share an environment. We introduce the "narrative paradigm" as well as persuasive strategies to help advocates and recipients interact effectively. The final chapter, Responsibility, takes on the issues of what constitutes "good" argument. What is ethical or not? What is appropriate for the argument context? The first part of the chapter considers language choices then discusses how argument fallacies can be destructive forces. The final section, then, works with the reader to develop a personal code of ethics.

We have provided many study tools in this book—lists of key concepts, answers to selected exercises in Appendix A, chapter summaries, and exercises that require students to apply chapter concepts. Appendix B contains a glossary of all the major concepts developed in the text along with references to their location. Appendix C is devoted to Research Strategies and is intended to provide resources for students who want to learn about debate and, perhaps, try attending a debate tournament. Appendix D, Intercollegiate Debate, is designed as a starting point for finding strong evidence to support arguments. Both Appendixes C and D can be accessed online at http://www.pearsonglobaleditions.com. The book's study aids should enable students to review for exams, do further reading, and have handy references when reading text material. We have used a variety of examples from law, education, ethics, business, and other fields to illustrate the argument concepts introduced.

This text is available in a variety of formats—digital and print. To learn more about Pearson programs, pricing options, and customization, visit http://www.pearsonglobaleditions.com.

ACKNOWLEDGMENTS

DEVELOPING A CONCEPTUAL FRAMEWORK FOR ARGUMENT

ARGUING CRITICALLY

Box 1.1 "Do Beauty Contests Harm Women?" illustrates how arguments can develop over disagreements about an issue. Each day, we are faced with many issues—some small and others more significant. The need for argument arises from our desire to persuade or convince others of a point of view or course of action. When we perceive that something should be done or that others fail to understand our views, we may choose to advocate for our ideas and beliefs—we make arguments to inspire change. When we advocate for significant change or

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BOX 1.1
DO BEAUTY CONTESTS HARM WOMEN?

Each year, more than 2 billion people worldwide participate in and watch beauty contests. In fact, beyond the many local and regional contests, there are more than fifty world beauty pageants held annually.[1] Although Miss America, among other pageants, has experienced declining audiences over the last thirty years, some pageants, such as Miss World, continue to attract global attention and viewers. Additionally, youth pageants and television programs such as *Toddlers and Tiaras* attract large audiences. Yet, despite their popularity, questions persist about whether they harm girls and women. The following discussion between two students addresses some of these concerns:[2]

Kaidren: Beauty contests undermine women as people. They promote an ideal of female beauty that is unrealistic, and very very few women can achieve it. Yet, this ideal pressures all women to conform to it. This is harmful because it encourages women to diet excessively, contributes to eating disorders, and encourages risky cosmetic surgery. But the "beauty myth" is so powerful that women willingly risk their health and even their lives to achieve what these contests promote.

Ramona: Wait a minute. This argument makes it sound as though women are easily brainwashed and can't figure out fact from fiction. There is nothing wrong with watching and admiring people who are fit, well proportioned, and healthy—in fact, these kinds of messages are especially important when you consider the obesity epidemic. We should strive for fitness. Anyway, both women and men enjoy beauty pageants; more women watch them than men. Women freely choose to enter them. No one is required to participate or watch—people get to make choices. Pageants haven't been forced on anyone and they don't force anyone to make bad choices.

Kaidren: You are missing the point. Healthy lifestyles are important and we should be teaching about how to be healthy. But that is not what beauty pageants do. They single out women as different from men. Women are judged on appearance rather than any other quality. And, achieving the ideal often requires poor health habits such as extreme dieting. Judging women—not men—on their looks subjugates women because it establishes an ideal feminine form that does not include intellect or any other ability. These contests set a standard of femininity that focuses almost exclusively on outward appearance at any cost.

Ramona: What is wrong with judging people on physical appearance? We judge people on particular attributes all the time. We evaluate professors on their ability to teach, irrespective of other abilities. We judge athletes on physical abilities without any concern for their intellect or emotional balance. We judge medical doctors on their skill and not on whether they are nice people. We evaluate people all the time based on physical, mental, or emotional attributes that are appropriate for the situation. Every competition, of every kind, values certain qualities over others and that's OK. Why would we exclude giving women recognition for outward appearance any more than we would exclude awarding a prize for best tattoo or the ability to lift weights?

BOX 1.1   CONTINUED

Consider the issues that emerged in this discussion. Both Kaidren and Ramona made arguments for and against pageants. As you read through the arguments again, consider the following questions:

1. Which arguer did a better job—Kaidren or Ramona? Why? Is it because her arguments support a position you already agree with? Or is it because she helped you understand something new and different that convinced you?
2. If you were Kaidren, what would your next argument be if this conversation continued? How do you think Ramona would respond?
3. Do you think these are good arguments? Are any issues or ideas missing? If you had been in the conversation, what would you have added?
4. Did you find any arguments that were not very good? What made them weak? How would you have strengthened them?

understanding of complex ideas, we may create many arguments and link them together to support our ideas and positions.

Often, people assume that to argue is bad—that when we have an argument with someone we are having a problem with them. This view is limited. Arguments happen at national and global levels over water rights, poverty, and health care to list just a few. But argumentation and advocacy are also regular features of our daily lives. We argue about which movie to see with our friends, what school we want to attend, or where to go on vacation. We advocate when we negotiate over how much to pay for a car or a house. We create arguments when we try to persuade people to think or behave differently.

Argumentation can be used for either good or bad, depending on the choices made by the advocates. This book focuses on how to positively use the skills of argumentation to (1) help others understand differing points of view, (2) explore ideas and alternatives, and (3) convince others of a need to change or act. Consider, for instance, the exchange between students in Box 1.1. This conversation presented a series of arguments that illustrate how discussion and arguing can work productively in each of these three ways. The students used arguments to help define the issues for discussion, clarify perceptions, and advocate for different points of view. Throughout the conversation, they engaged in the processes that will be the focus of this book: critical thinking and argumentation.

CRITICAL THOUGHT

Many theorists have explored critical thinking and the role it plays in education, our understanding of the world, and our understanding of ourselves.[3] Done well, critical thinking helps us consider issues and problems systematically and rigorously. It is fundamental to our ability to learn and make sense of the world around us. Some, for instance, have described *critical thinking as the process whereby ordinary people apply the scientific method to the ordinary world.*[4] Critical thought requires the ability to analyze and evaluate conclusions based on a coherent

understanding of relevant issues. Theorist Joanne Kurfiss offered the following definition for critical thinking:

> an investigation whose purpose is to explore a situation, phenomenon, question, or problem to arrive at a hypothesis or conclusion about it that integrates all available information and that therefore can be convincingly justified.[5]

Often, when confronted with a challenge or problem, people want to leap to a solution or find a quick resolution. Critical thinking asks us to pause. People who think critically about issues will not settle for apparent or obvious solutions. They will suspend judgment while seeking out relevant opinions, facts, and reasons that promote good decision-making.

Cycle of Critical Thought

Critical thought is a complex process and, if done well, it can help us examine and explore intricate ideas to better understand both the issues at hand and the consequences of acting—or not acting. As this book will explore, the world is systemically connected and decisions about acting in one area will have effects in other areas. For instance, we know that exposure to ultraviolet rays can cause skin cancer. Yet, as noted by the Skin Cancer Foundation, "most people don't apply enough" sunscreen and should use products with a Sun Protection Factor (SPF) rating of 30 or higher.[6] Concern over skin cancer and skin damage, over time, has led to more people deciding to reduce their exposure to sunlight and, when in the sun, use high SPF sunscreen for protection. This action makes sense given the risks associated with UV rays. However, an important and seldom discussed side effect of this decision is that many people, particularly children, do not get enough vitamin D.

Normally, sunlight causes the body to produce vitamin D, which is necessary for bone growth and strength. Without enough UV exposure, people have to take steps to ensure a sufficient intake of this vitamin. The point here is that the world is interconnected and decisions often have consequences and implications beyond the immediate decision. A process of systematic critical thinking can help us uncover connections, evaluate options, and inform actions.

Although there are many ways to understand critical thinking, it can generally be considered as a cycle that moves through four interrelated steps: (1) Assess, (2) Explore, (3) Evaluate, and (4) Integrate. These are illustrated in Figure 1.1, "Cycle of Critical Thought."[7] Our ability to move through each of these steps effectively helps ensure quality decision-making. And, although each step may appear relatively simple, they are actually complex. Each step asks us to consider a series of issues and questions so that we can fully explore a given subject. The following text provides greater detail about how we move through the critical thinking cycle and these four steps.

Step 1. Assess. When we assess, we work to clearly identify the problem or issue and then discover the relevant information. Specifically, assessment includes the following questions:

- What is the need? People reason and argue because a need arises. The need for argument can be anything from "Should I do my homework or go out with my friends?" to "Should marijuana be legalized?" In the case of beauty pageants, the students chose a topic for a classroom presentation: "Do beauty contests harm women?" They could

Integrate: What is our best course of action?

Assess: What are the problems or needs?

Evaluate: What are the most important considerations?

Explore: What are the primary issues and assumptions?
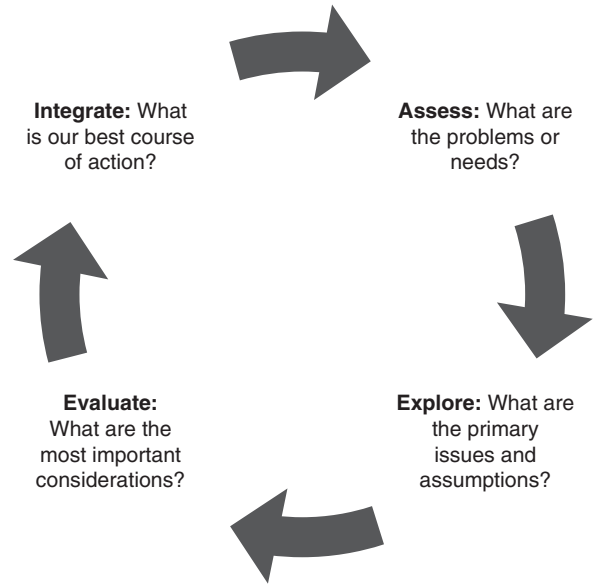
FIGURE 1.1   Cycle of Critical Thought

have spoken on any of a number of possible topics related to pageants. They might have argued, "What should be done about beauty pageants?" Or, they could have asked, "What topic will get us the best grade on this assignment?" The need for argument is simply the impetus for critical thought and discussion. In Chapter 2, when we discuss argument situations, we will talk about the need as the "exigence" for argument. The need helps us frame the conversation so that we know what is included and what is excluded from discussion. Why are we talking about this issue? What are we trying to figure out?

- What is the purpose? Purpose represents the goal of the discussion. It can be as simple as understanding more about beauty pageants or as complicated as statistical analyses of how pageants and the "beauty myth" affect a group's identity and feelings of adequacy. The purpose of inquiry and argument does not need to focus on a particular course of action or what decision should be reached, but it does need to identify the goal of the inquiry: What do we hope to achieve? Why are we having this conversation? In Box 1.1, the purpose of the conversation was to reach an understanding about the potential harms related to beauty contests. We need to emphasize here the importance of understanding the purpose of arguing about a subject. Are we trying to create understanding? Change beliefs? Motivate someone to action? And, even more significantly, do all the people engaged in the argument share the same purpose? If not, discussing and assessing the goals of those involved becomes a primary task. In Chapter 5, we will discuss how propositions frame discussions and debates. They serve to define what is talked about and for what purpose.
- What information is needed? Answering questions and moving a conversation toward an outcome requires appropriate information. With beauty contests, the students

needed to clearly understand what pageants are, how they work, and what their effects are. The students also needed to figure out if beauty contests are different from other kinds of events and contests in which people are judged for their appearance or a particular ability. Information can take many forms including statistical data, reports from eyewitnesses, individual observations, or any number of other sources of material that can help a person answer the question. Chapter 6, which focuses on evidence in argument, considers how information can be found and used. Information provides substance for thought. It is the material we draw upon to develop ideas and synthesize new thoughts.

Step 2. Explore. Exploration examines the interpretations and connections that occur within the issues, research, and other parts of the discussion. It includes an exploration of assumptions, biases, and the multiple points of view that affect how we understand and approach issues and ideas. Specifically, this step includes:

- What are the dominant concepts involved? *Concepts are the theories, definitions, rules, and laws that govern how we think and act.* We know we should wear our seat belts—there are laws as well as theories of accident survival that tell us this. We know that we have a theory of fairness and equality. We have laws that protect minority rights while allowing majority rule. And we know that it is wrong to objectify or subjugate people. These concepts provide support for decisions we make about child beauty pageants or other controversial subjects. Concepts are constructs of the human mind.[8] They represent a framework within which we think and act. People once believed that the sun revolved around the earth and argued strongly against those who challenged that belief, such as Galileo, who in turn argued based on observations and the evidence they collected. Concepts can be slow to change and replacements may be difficult to accept because beliefs are deeply imbedded in our understanding of the world and controversial subjects.

- What assumptions shape the issues? *Assumptions are the presuppositions and viewpoints we take for granted.* We assume, for instance, that people try to be fair. We assume that we don't want to subjugate people. And we also assume that people will watch beauty pageants, which in turn will sell advertisers' products and services. This is one of the reasons contests such as Miss America and Miss World were started. It is important to understand our assumptions because they represent a "baseline," or starting point, for thought, and if they are flawed or misunderstood, the reasoning that stems from them can also be flawed. Often, assumptions are problematic because they are part of our ways of thinking and are often unknown and unexplored by us. We assume the world is round. We assume that most people will obey laws. And, we act on these assumptions even if they are incorrect. Revealing, testing, and challenging our assumptions helps us understand our own choices and make clearer, better arguments. The challenge, of course, is in identifying them in the first place.

- What points of view are involved? People reason and think from different points of view. That is why, for instance, two people can see the same movie and have vastly different opinions about its quality. Or why some people support and others oppose beauty pageants. Our points of view come from our individual backgrounds, thoughts, experiences, and attitudes. They help us frame issues and integrate them into our

thinking. The students, talking about beauty pageants, illustrate this point. Two educated people, with similar backgrounds, interpreted and understood the issues of beauty contests differently. Whenever we work with other people, we encounter different points of view. Part of critical thought involves a process of interpreting and understanding other views as well as our own.

Step 3. Evaluate. This step examines the quality of information and connections among possible solutions and considers how factors such as bias and points of view affect potential outcomes. Based on this synthesis and integration, approaches for addressing issues emerge and are evaluated until a preferred approach is found. This step includes:

- What can we interpret and infer from our exploration? When we think, we blend new information and ideas into our existing points of view, concepts, and assumptions. From this combination of questioning, examining, researching, and understanding, we reason toward a conclusion. We interpret information and infer from it to reach our conclusions. With beauty pageants, for instance, based on what the students knew, their research, and their conversations, they interpreted their data and inferred conclusions from it. The process of interpretation and inference is one of making sense of data and reasoning from it toward a goal.

- What implications or consequences can we see? Our reasoning and thinking carry with them implications and consequences. If we act on the conclusions we draw, what will happen? If we change our beliefs and attitudes, what effect will that have on future decisions we might make? Even though we often consider in-class presentations as simply another assignment, they have the potential to change attitudes and actions in classroom audiences. If the two students convince a group of students to act—or not to act—to boycott or support beauty pageants, there will be consequences. Critical thought is not a self-contained entity. It carries with it potential outcomes from the process.

Step 4. Integrate. The final step in the critical thinking process involves selecting the preferred alternative, monitoring its effectiveness, and developing strategies for continued understanding and evaluation of how well the solution solves the problem and the conditions that caused it. This step, then, leads back to the first steps of assessing, exploring, evaluating, and integrating potential issues and problems. This final part of the cycle is important. Whatever solutions advocates chose, they have consequences that will raise issues that need to be assessed, explored, evaluated, and integrated. This is how the critical thinking cycle supports our decision-making over many issues and long periods of time. Box 1.2, "Apply the Theory," is designed to help guide you through this process and apply the cycle of critical thought.

Using critical thinking skills effectively helps us understand alternatives and make reasonable decisions. However, when we fail to work through the cycle and consider alternatives, we can make mistakes. Skipping steps or failing to examine our assumptions can yield poor outcomes. Some barriers to critical thought are described in Box 1.3, "Barriers to Effective Critical Thinking."

Critical Thinking as a Skill

The critical thinking cycle we just explored is a powerful tool. It helps us define and focus on a need, identify ways of thinking about the need, and then design approaches for addressing

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BOX 1.2
APPLY THE THEORY: THINKING CRITICALLY

Consider the topic introduced in Box 1.1 and the implications for youth beauty pageants as well as television programs such as *Toddlers and Tiaras*. Then, think through the parts of the critical thinking cycle and answer the following questions:

Step 1. Assess

   1. Is there a need to discuss this subject? What is the need? In a single sentence, describe it.
   2. What is the purpose of discussing this subject? Write your purpose in a sentence. What is the goal you seek? Awareness? Action?
   3. What information can you find to support your purpose? Using any Internet search engine, identify and paraphrase three sources that support your purpose.

Step 2. Explore

   1. Identify and write down three concepts that support and three concepts that don't support youth beauty pageants.
   2. For each concept, write down at least one assumption that supports the concept.
   3. Brainstorm and write down the different points of view shaping the discussion. Identify points of view that are different than your own.

Step 3. Evaluate and Interpret

   1. Based on what you have read and what you have brainstormed, write down three conclusions you can reach.
   2. Think about the implications of each conclusion you reached. Next, write down what you think would occur if you acted on them.
   3. What are the implications, both good and bad, of banning all beauty pageants?

Step 4. Integrate.

   Each step you have completed has led you to a point where you can make a choice. Considering the choices you have developed, which do you think is best? Why? The answer to this question, why one choice is better than another, informs how we engage and understand argument.

the need. This is why critical thinking is such a vital skill; it helps prevent people from making bad decisions and helps them solve problems. It allows us to consider actions and consequences in rational and systematic ways. This ability has applications far beyond classroom applications and homework assignments. Richard W. Paul and Gerald M. Nosich, noted critical thinking theorists, observed:

> The kind of "work" increasingly required in industry and business is "intellectual," that is, it requires workers to define goals and purposes clearly, seek out and organize relevant data, conceptualize those data, consider alternative perspectives, adjust thinking to context, question assumptions, modify thinking in light of the continual flood of new information, and reason to legitimate conclusions. Furthermore, the intellectual work required must increasingly be coordinated with, and must profit from the critique of, fellow workers.[9]

BOX 1.3
BARRIERS TO EFFECTIVE CRITICAL THINKING

The ability to think critically is an important skill. However, most of us have developed habits and thinking skills that inhibit our ability to effectively engage issues and problems creatively.[10] These include:

1. *The "Right Answer" Assumption*. Most issues and problems have many possible answers. Yet, much of our education has taught us to look for the one correct answer. Focusing on finding a single right answer can obscure alternatives and we may miss opportunities. Instead, look for several "correct" approaches or answers and then evaluate which is best.

2. *Confirmation Bias*. People tend to associate with others who are similar to them. We tend to read books we like and listen to concerts featuring bands we like or go to movies we think we will enjoy. Generally, these habits are not harmful until they influence our ability to think critically. When we only read research that supports own assumptions, when we only read news stories that validate our political beliefs, we are confirming what we already know but failing to explore all sides of an issue. When researching a subject, it is important to ask yourself what someone taking the opposite side might read, research, or argue. Understanding other points of view is central to effective critical thinking.

3. *Accepting Authority without Question*. One of the reasons we explore and research issues is because we seek out experts who have more background and knowledge than we do. We assume that because they have written books and articles, given public lectures, and traveled "talk show" circuits, they are irrefutable authorities in their field. But this is not always the case. Sometimes experts are wrong. For instance, Walter Lippmann, American intellectual, writer, and commentator, once made the point that "Among the really difficult problems of the world, the Arab-Israeli conflict is one of the simplest and most manageable."[11] Seek out more than one expert and understand the credentials and qualifications of those you use.

4. *Rules and Logic Must be Followed*. Rules and logic are important and they are part of critical thinking. Rules allow us to live and work together and they are discussed later in this chapter when we talk about spheres and fields. However, rules and logic can impose restrictions on how we think because they tell us what is acceptable and what is not acceptable. An alternative is to assume there are no rules and use analogies to try to see relationships and connections among things that we might not otherwise perceive. Sometimes creative and imaginative approaches can be best. Discovering alternative ways of seeing issues can help open new approaches and ideas.

5. *Being Practical Is Best*. Sometimes people make a decision because they believe it is practical. They might say, "We need to buy a used laptop computer because that is what we can afford." This approach presumes a conclusion because of an assumed constraint without considering alternatives. While issues of practicality ultimately may prevail, try imagining approaches irrespective of practical constraints. Consider what "should" be done as opposed to the feasibility of what "could" be done.

6. *Avoiding Ambiguity*. Ambiguity can be frightening because it introduces uncertainty and risk about decisions. Most people prefer certainty and strive for a clear, predictable understanding of events and actions. If we don't know for sure what will happen, we may decide not to try. However, the gray areas imposed by ambiguity are where creativity and

(continued)

BOX 1.3   CONTINUED

innovative thinking exist. When you find ambiguity, try imagining the many possible out-
comes associated with the issues or actions that are in the gray area.

7. *Being Wrong Is Bad.* Much of our upbringing and education imposes an assumption that
being wrong is bad. Wrong answers result in bad grades. Wrong behavior results in pun-
ishment. As a consequence, people grow to fear being wrong and work hard to avoid
it even though that approach may stifle creativity and inhibit finding alternatives. The
challenge about being wrong is a tendency to deny or move away from the decision. Or
sometimes we simply decide to do nothing out of fear of being wrong. Instead, work to
understand why a decision was wrong and what other alternatives existed that might have
improved the outcome.

Paul and Nosich go on to comment that supervisors and employers value workers who can
reason well and express themselves clearly.

Yet, as much as we claim to prize the value of critical thought and inquiry, we are
generally not very good at it. Critical thinking theorists Richard Paul, Linda Elder, and
Ted Bartell, for instance, examined thirty-eight public universities and twenty-eight private
universities to determine the level and quality of critical thinking instruction. They found
that although 89 percent of teachers claimed critical thinking was a primary component of
their instruction, only 19 percent could provide a clear explanation of what they taught that
was critical, and only 9 percent were actually teaching critical thought.[12] Richard Arum and
Josipa Roksa in their book *Academically Adrift: Limited Learning on College Campuses* made the
point that forty-five percent or more of college students do not achieve statistically signifi-
cant gains in their critical thinking and complex reasoning skills by the time they graduate
from a university with an undergraduate degree.[13]

Most of us recognize the importance of critical thought even if it is not always taught
effectively.[14] And, as important as it is, critical thinking is not an easy skill to develop or use.
It requires time, discipline, and practice. As we think, develop ideas, and argue it is impor-
tant to actively approach our questions with an intentional, critical lens. We should:

- Refine generalizations and avoid oversimplification.
- Generate and assess solutions to problems.
- Compare perspectives, interpretations, and theories.
- Read critically and seek out information that disagrees with our own perspectives.
- Listen critically, seriously considering views with which we disagree.[15]

ARGUMENTATION AND ARGUMENT

Argumentation engages us in the cycle of critical thought. *Argumentation is the process of
making arguments intended to justify beliefs, attitudes, and values so as to influence others.* We
see argumentation in media ads for products, campaign ads for candidates, newspaper edi-
torials, Internet sites on public issues, business meetings where proposals are made, and
in many other places. Argumentation occurs everywhere, and we deal with it as readers,
listeners, writers, and speakers on a daily basis. In fact, argumentation is perhaps one of the

most important skills we can develop. As participants in a world community and members of democratic communities, argumentation is the means by which we engage in discussion about our present and our future. It is the process by which we exercise democratic rights and self-determination.

Hugh Heclo, a professor of public affairs at George Mason University, took the position that American politics has been transformed in recent decades to become hypersensitive to public opinions and anxieties. Unprecedented access to information from homes using smartphones and tablets as well as the ability to disseminate opinions freely through the Internet and other media have made the individual voice and opinion more powerful than ever.[16] We have the ability to access the world's information in an unprecedented way.

The importance of his observation should not be underestimated. We live in a time where the role of argument, arguers, and recipients has tremendous potential power to shape our world. Technology has allowed ideas and arguments to spread across the world quickly and powerfully. The death of Neda Agha-Soltan provides a clear and tragic illustration of this point. In 2009, following an angrily contested presidential election in Iran, Neda was shot during one of the demonstrations. The event, captured on a mobile phone and uploaded to the Internet, was arguably, as *Time Magazine* put it, "the most witnessed death in human history."[17] Neda, which is the Persian word for "voice," became a symbol for the opposition and stark evidence for arguments about the political and personal outrage of a community. The video was broadcast around the world and millions saw and heard a message of violence, protest, and the struggle to have a voice. To participate globally, we need to fundamentally understand how arguments are made and, just as importantly, how they are refuted.

Process

Argumentation is significant for the development and maintenance of a healthy society. It can occur only when people are interested in hearing or reading what others have to say and in seriously considering others' proposals. When parties engage in argumentation, they agree to certain conventions and tacit principles. Communication theorist Susan Shimanoff made the point that for people to communicate they must "agree on such matters as how to take turns at speaking, how to be polite or how to insult, to greet, and so forth. If every symbol user manipulated symbols at random, the result would be chaos rather than communication."[18]

Advocates agree to rules for conducting the discussion, they make contributions as required, and they seek the approval of the other parties involved.[19] They agree to what is acceptable and not acceptable for the context, how long to speak, how to take turns, and what the process for decision-making is. If people refuse even to listen to the other party, argumentation cannot occur. One of the most common sets of rules for governing debates is "Roberts Rules of Order," which is described in Box 1.4, "Robert's Rules of Order."

Advocates begin by using the critical thinking cycle to generate arguments about the topic being discussed. Argumentation is the process of selecting arguments from that set and connecting them in ways that allow arguers to construct a compelling case for positions or to address needs. For instance, lawyers study all the arguments available in a case, they examine past cases and precedents, they select the best among those, and then connect the arguments together to make a case for the prosecution or defense in courts of law. Legislators study many arguments and then may select a series of arguments to support broad-based policies or

■ ■ ■ ■ ■ ■

BOX 1.4
ROBERT'S RULES OF ORDER

For argumentation to occur, participants need to agree on a set of rules or procedures to govern the process. In personal conversations, these rules are often implicit and understood. They include turn taking, no interrupting, and not shouting. In more formal contexts such as government proceedings or community hearings, the rules tend to be more explicit and clearly developed.

The most widely used rules for debating are *Robert's Rules of Order Newly Revised*.[20] These rules describe when someone can speak, for how long, and about what. They are designed to keep arguers on task and focused on the questions being discussed. The rules are extensive and are designed to ensure that all relevant voices are heard, the process for giving voice is fair and complete, and the outcomes will support both critical thought and critical evaluation of ideas.[21]

political change. Businesses may consider many possible arguments for a product or service, group the best individual arguments together, and advocate for their products and services in marketing and public relations campaigns. A model of the process of argumentation can be found in Figure 1.2, "Model of Argumentation Process." In this figure, arguers use the four steps of the critical thinking cycle to develop issues into potential arguments (Steps 1 and 2). Some of those arguments will be more or less significant than others (Step 3). By carefully selecting the best arguments to support the arguer's overall completion, the process of argumentation seeks to integrate many ideas and issues into a single, overall conclusion or position (Step 4).

Speeches, essays, group discussions, legislation, and political campaigns are all platforms where argumentation can take place. Argumentation is composed of individual arguments. *An argument is a set of statements in which a claim is made, support is offered for it, and there is an attempt to influence someone in a context of disagreement.*

It is important to understand argument in this sense—a claim, plus support for it in the form of reasoning and evidence—as distinguished from interpersonal arguments or
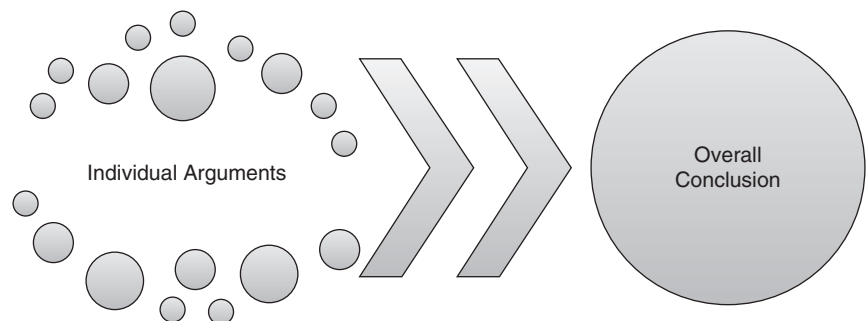

Individual Arguments

Overall Conclusion

Arguer *generates* multiple, potential arguments

Arguer *selects* a set of arguments that best reach the conclusion

FIGURE 1.2   "Model of Argumentation Process"

disputes.[22] In this latter sense, "argument" is a kind of (usually unpleasant) interpersonal exchange, as when we say, "John and Mary were having an argument." Sometimes described as "quarrels" or "squabbles," these kinds of arguments usually involve two or more persons engaged in extended overt disagreement with each other.

That is not the sort of argument with which this book is concerned. Arguments of the kind described here occur when we say something like, "John made an argument in support of his proposal for the new marketing plan." This view considers whether an argument is sound and effective; it emphasizes argument as a reasoning process and considers arguments as units rather than as interactive processes.

Arguments are only one kind of communication. When we greet someone ("Hello, how are you?"), issue commands ("Shut the door"), vent our emotions ("I hate it when you do that!"), make promises ("I'll return your book tomorrow"), and so forth, we do not produce arguments. To clarify the differences between arguments and other forms of communication, we will describe the important features of argument according to our definition.

Characteristics

First, to be considered an argument, an arguer, generally, should make a claim. *A claim is an expressed opinion or a conclusion that the arguer wants accepted.* In the beauty pageant discussion, some claims were:

> Beauty contests undermine women as people.
>
> There is nothing wrong with watching and admiring people who are fit, well proportioned, and healthy.
>
> Judging women on their looks subjugates them.

Claims take on different forms in various contexts; they function as claims in relation to the support offered for them. As we will show in Chapter 5, claims in a given individual argument may themselves function as forms of support for the main claim, or thesis statement, of an extended argument. Examples of main claims include in criminal law the charge brought against the defendant by the prosecution; in the legislature the briefer version of a proposed bill or piece of legislation; and in medicine the diagnosis and recommended treatment regimen. In argumentation and debate, these main claims are often called *propositions* or *resolutions*.

When someone makes a claim, he or she is expected to offer support for it in the form of reasons and information. If we issue a command or make a promise ("I will pick you up at 10"), we commit ourselves by making the statement, and no further proof is necessary.[23] Likewise, pure description ("The setting sun was reflected in a rosy haze"), small talk ("Things are so-so, could be better"), and other neutral statements generally do not make claims—they do not advance statements on which there is disagreement.

Sometimes, we can decide whether a statement is a claim only by considering its context. Arguers often leave their evidence, reasoning, or claim unstated. Do the following examples contain claims?

> When guns are outlawed, only outlaws will have guns.
>
> Coors Light, 'cause coffee's nasty after football.
>
> Every time I'm nice to him, he ignores me.

If we know that the first statement is a bumper sticker displayed by an opponent of gun control, we can conclude that it is a claim. Spelled out, it would say, "making guns illegal means that only those who circumvent the law will have guns." Knowing that the second statement occurred in a beer ad would indicate that the claim is "[Buy] Coors Light" and that the remainder is a good reason for doing so. It is ambiguous whether the third statement is a claim or not. Knowing more about the person's relationship to her friend would help us to determine whether it is a claim. Some claims can be recognized as claims only when we know about the speaker's intention, the claim's relation to the other statements made along with it, or the situational context in which a claim is made.

The second characteristic of an argument is that support is offered for the claim. Claims are supported both by the evidence and reasoning or inferences that connect the evidence to the claim. Evidence comes in many forms, but it always functions as the foundation for argument or the grounds on which arguments are based. When we make an argument, we move from statements we believe our receivers will accept (evidence) to statements that are in dispute (claims). *Evidence consists of facts or conditions that are objectively observable, beliefs or statements generally accepted as true by the recipients, or conclusions previously established.*

Evidence does not consist only of objectively observable facts. From a rhetorical point of view (i.e., that arguers seek acceptance for their claims from audiences), it makes sense to regard any proposition, or belief accepted by everyone in the audience, as a starting point for argument. There are many statements ("A person is innocent until proven guilty" or "One ought to keep one's promises") that are not facts but that could function as evidence in relation to a claim because the hearers would accept them as reasonable assumptions. The nature of evidence and how it functions in an argument will be discussed more fully in Chapter 5.

In the beauty contest discussion at the beginning of this chapter, statements viewed as evidence by the speakers and accepted by others count as evidence. Examples of such statements include:

> We have an obesity epidemic.
>
> Both women and men enjoy beauty pageants.
>
> We evaluate teachers, athletes, and professionals on particular attributes.

To be counted as evidence, statements should be accepted and viewed as relevant and true by the parties in a dispute or audiences to whom arguments are addressed. (If only one party—the arguer—accepts a statement, then it is a claim, not evidence.) So, for instance, when Kaidren says that "the 'beauty myth' is so powerful that women willingly risk their health and even their lives," Ramona does not accept that as true and, therefore, it does not function as evidence; rather it functions as a claim. If, however, Kaidren provided credible support from research, expert sources, or other trusted references that was accepted by Ramona, then this statement could be used as evidence. In other words, if people in an argument agree to the statement, it is evidence.

The arguer who begins by establishing claims based on statements that are not accepted will not get far. For statements to function as evidence and provide reliable grounds for claims, they must be acceptable to the recipients. For instance, if Kaidren could show specific examples of how pageants have been harmful or present credible support for how they have eroded women's rights, then Ramona's statements about their positive attributes

would not be able to function as evidence because they would be in dispute. The process of argumentation begins with testing assumptions about what is true for the parties involved and then building—argument by argument—until a conclusion is reached.

Claims are also supported by the link that the arguer makes between the evidence and the claim. The part of the argument containing reasoning is frequently called the inference. Reasoning can take various forms. Those that occur most frequently will be described in Chapter 6, and you will become experienced at identifying them. *Reasoning constructs a rational link between the evidence and the claim and authorizes the step we make when we draw a conclusion.* Reasoning answers the question, "How did you get from the evidence to the claim?"[24] It consists of general principles that explain how the evidence and the claim are connected.

The study of argument is made all the more interesting because arguers often do not explicitly state their inferences. They provide evidence and make claims, but often one can only guess how the link between the two was made. For example, if we study the evidence presented by the pageant discussants along with their claims, we will find that some of their inferences, all unstated, were functioning in the argument:

> Women imitate beauty behavior seen in pageants and, as a result, engage in unhealthy practices in an attempt to achieve an idealized view of beauty.

> Because both women and men enjoy pageants, women choose the consequences as opposed to having someone else impose a standard for beauty on them.

> Judging people based on their physical beauty is the same thing as judging athletes and doctors on their skills.

Inferences usually make explicit a link, which enables the arguer to connect evidence with claims and thus construct an argument.

The third and last characteristic of arguments is that they are attempts to influence someone in a context where people disagree with one another. The phrase "attempts to influence" is important because the arguer may or may not succeed. The recipient of the argument is free not to agree with the expressed opinion of the arguer. The person to whom the argument is addressed may accept the claim, reject it, or continue to express doubts about it.

To say that arguments are "attempts to influence" means that there must be a recipient, or "arguee," to whom the argument is addressed that is capable of responding to it. Arguees must be open-minded and able to change their beliefs or actions because of the argument. Furthermore, in choosing argument instead of command or coercion, arguers recognize that the process of argument is reciprocal—that initiative and control pass back and forth as arguers state their viewpoints and as recipients weigh their support and decide whether to accept the argument or not.[25]

This reciprocal nature is especially important because sometimes recipients may decide to accept or reject an argument because of the relationships they have with the arguer or because the arguer fails to address important values or issues even if the argument is logical and well constructed.

While listening to arguments, recipients retain the option of challenging, questioning, criticizing, or countering the expressed opinions of the arguer. The influence that arguments aim to bring about assumes many forms. Arguers may want recipients to become concerned