

## COURSE GUIDEBOOK



### Argumentation: The Study of Effective Reasoning

#### Part I

- Lecture 1: Introducing Argumentation and Rhetoric
- Lecture 2: History of Argumentation Studies
- Lecture 3: Formal and Informal Argument
- Lecture 4: The Emergence of Controversy
- Lecture 5: Resolutions and Issues
- Lecture 6: Stasis—The Focal Point of Dispute
- Lecture 7: Presumption and Burden of Proof
- Lecture 8: Argument Analysis and Diagramming
- Lecture 9: Claims and Evidence
- Lecture 10: Reasoning from Parts to Whole
- Lecture 11: Moving from Cause to Effect
- Lecture 12: Establishing Correlations

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Argumentation, Part I  
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## COURSE GUIDEBOOK



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### Argumentation: The Study of Effective Reasoning

#### Part I

Professor David Zarefsky  
*Northwestern University*



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David Zarefsky received his B.S. (with highest distinction) from Northwestern University and earned his master's and doctoral degrees also from Northwestern. He has taught at Northwestern for over thirty years. From 1988 through 2000, he was Dean of the School of Speech. Currently, he is Owen L. Coon Professor of Argumentation and Debate and Professor of Communication Studies.

Dr. Zarefsky has served as President of the National Communication Association (NCA), one of the nation's oldest and largest professional organizations for scholars, teachers, and practitioners in communication and performance studies. He has held a number of other leadership positions in NCA and other professional associations and is a former editor of the journal *Argumentation and Advocacy*.

A prolific writer, Dr. Zarefsky has written five books and edited three more and has an impressive list of scholarly articles and reviews to his credit. He received the 1986 NCA Winans-Wichelns Award for Distinguished Scholarship in Rhetoric and Public Address for his book *President Johnson's War on Poverty: Rhetoric and History*. He won the same award in 1991 for *Lincoln, Douglas, and Slavery: In the Crucible of Public Debate*. He is one of only three people to have received this prestigious award twice.

A nationally recognized authority on rhetoric, argumentation, and forensics, Dr. Zarefsky maintains a busy schedule as a member of external review committees for departments of communication studies or speech communication at various universities. He is a member of the national advisory board and the steering committee of the Center for Presidential Studies, established at Texas A&M University in conjunction with the George Bush Presidential Library.

At Northwestern, Dr. Zarefsky teaches undergraduate and graduate courses in the history of American public discourse, argumentation theory and practice, and rhetorical analysis and criticism. He has been elected to Northwestern University's Associated Student Government Honor Roll for Teaching on twelve occasions.

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**Argumentation: The Study of**  
**Effective Reasoning**

**Scope:**

This series of twenty-four lectures examines a common but under-studied aspect of human communication: argumentation. Far from the stereotypes of contentiousness or quarrelsomeness, argumentation is the study of reason giving by people to justify their acts or beliefs and to influence the thought or action of others. It is concerned with communication that seeks to persuade others through reasoned judgment. The course is introductory in that it does not presume prior study of argumentation. Because all of us practice argumentation, however, the course is also sophisticated in that it offers a systematic analysis, a precise vocabulary, and a philosophical foundation for what all too often is an activity conducted intuitively and unconsciously.

The first three lectures provide the necessary intellectual background. Lecture One defines argumentation and situates it among a family of terms: *rhetoric*, *logic*, and *dialectic*. Unfortunately, these terms either have acquired negative stereotypes in contemporary culture or they have fallen into disuse; therefore, it is necessary to understand them in their classical context. Each term is defined and the terms are related to one another. Lecture Two then surveys, in broad-brush fashion, how the study of argumentation has evolved from classical times to the present. Originally, argumentation was the heart and soul of rhetorical studies, and rhetoric was regarded as one of the seven basic liberal arts. During the intervening centuries, rhetoric was separated from its most intellectual elements, argumentation was taken over by philosophy, and formal logic (especially symbolic or mathematical logic) was regarded as the prototype for all reasoning. The lecture summarizes consequences of these trends and includes a discussion of several late twentieth-century efforts to refocus argumentation studies.

Because much of the contemporary revival of argumentation has emphasized its informal character and, hence, the inapplicability of formal logic as a model, Lecture Three is devoted to the differences between formal and informal reasoning. The main patterns of formal deduction—categorical, conditional, and disjunctive reasoning—are described and illustrated. The lecture identifies the limitations of formal reasoning as a prototype and explains how informal reasoning is fundamentally different.

The next four lectures, Four through Seven, discuss the basic components of a controversy, the situation in which argumentation naturally arises. Lecture Four identifies the conditions that lead people to advance claims and to give reasons for them. It also explains that argumentation, despite its seemingly adversarial character, is at root a cooperative enterprise. The arguers have common goals of resolving disagreement and agree that the best way to do so is to submit

competing claims to rigorous testing. The lecture distinguishes statements that precipitate controversies from those that do not and briefly considers how controversies begin and end.

To examine a controversy, we must have a command of the basic concepts of the situation and their relationship. Accordingly, Lecture Five is devoted to resolutions—statements that capture the basis of the controversy—and issues, the subsidiary questions that inhere in a resolution and are vital to its success. The lecture classifies resolutions and explains how different types of resolutions give rise to different issues. The common patterns of these issues are referred to as *topoi* (places). Lecture Six is devoted entirely to the key concept of *stasis*. This refers to the focal point of the argument, which is created by the confrontation of assertion and denial. The lecture explores how different choices about *stasis* affect argument, both in the legal setting in which it was originally devised and in non-legal arguments as well. Finally, Lecture Seven explores the related concepts of presumption and burden of proof. These concepts allocate responsibilities among the arguers and establish what must be done for a controversy to proceed to resolution.

After exploring the controversy as a unit of discourse, the next several lectures shift from the macro to the micro level and examine individual arguments. Lectures Eight through Thirteen are concerned with the construction of arguments and Lectures Fourteen through Sixteen have argument appraisal as their focus.

Lecture Eight begins this series by defining the basic components of an argument (a claim, evidence, and an inference linking the evidence to the claim) and describing how these components can be represented diagrammatically. It also considers the speculative question of whether diagrams capture or distort the essence of arguments. Lecture Nine is devoted to the nature of claims and evidence. It relates the earlier discussion of resolutions to other claims, and it surveys several types of evidence and tests for the adequacy of evidence. Lectures Ten through Thirteen are devoted to the inference and the warrants that license us to make an inference. Six inferential patterns are examined carefully during these four lectures—example, cause, sign, analogy, narrative, and form. In each case, the lectures explain that the inference depends on probability rather than certainty. The basic pattern of the inference is described, its uses are considered, and tests are offered that help to determine whether the inference is likely to be sound. Unlike deductive reasoning, in which the soundness of an inference is a purely formal question, in argumentation, the soundness of an inference is governed heavily by context and experience.

Because the goal in constructing arguments is to have not only some sort of reasoning structure but one that will influence critical listeners, the appraisal of arguments becomes the focus of Lectures Fourteen through Sixteen. These lectures offer three different approaches to the question “What makes an argument valid?” Lecture Fourteen introduces the concept of validity by

reference to formal argument, then considers what errors in each of the six informal inference patterns will make an argument invalid. Lecture Fifteen explores the broader meaning of *fallacy* and examines problems in argument that can arise in any of the inference patterns. These include deficiencies in clarity, deficiencies in relevance, and the problem of vacuity. Lecture Sixteen circles back on the concept of fallacy once again, by showing that supposedly fallacious inferences are sometimes valid and suggesting that validity may be more a matter of procedure than of form. In this view, valid arguments are those that enhance the purpose of resolving disagreement. Examples are offered of normative standards for arguments that follow from this position.

With Lecture Seventeen, the focus shifts back to the macro level. Having considered the workings of individual arguments, we now consider how arguments are assembled together in a case for presentation, attack, and defense. These dynamics of controversy are considered in Lectures Seventeen through Twenty. Lecture Seventeen explores the basic choices of selection and arrangement that are involved in constructing a case—a structure of arguments that is assembled to support or to oppose the resolution. Lecture Eighteen introduces the processes of attack and defense, again pointing out that despite the military metaphor, these are cooperative activities. Choices regarding the selection of arguments for attack and the development of the attack are considered in some detail. Lecture Nineteen completes the discussion of attacks, then examines the process of defending and rebuilding arguments, in which the choices available to the advocate are far fewer. Lecture Twenty is devoted entirely to the role of language in argumentation. By considering the role of definitions, figures of speech, precision, and intensity, the lecture establishes that language is integral to argument, not ornamentation that is added to language-free content.

The final group of lectures moves to an even more macro level and considers the practice of argumentation in society. Lecture Twenty-One presents the concept of argument spheres in which different expectations shape the culture of arguing. It then addresses the nature of argumentation in the personal sphere. Lecture Twenty-Two is devoted to the technical sphere, where argumentation takes place in specialized fields. The concept of *argument field* is presented and examples are drawn from the fields of law, science, management, ethics, and religion. Lecture Twenty-Three deals with the public sphere, in which matters of general interest are discussed and the public participates in its capacity as citizens. This lecture also explores the relationship between a robust public sphere and a healthy democracy.

Finally, Lecture Twenty-Four returns to the level of generality with which the series began and considers the goals served by argumentation as a process of interaction. Most significantly, it is a means of collective judgment and decision making. It also is a way of knowing and a means to the achievement of the goals of democratic life. As the conclusion notes, although it is sometimes fashionable

to demean an *argument culture* as inimical to harmony and civil peace, a culture of argumentation is something to be embraced in a world in which important decisions must be made under conditions of uncertainty.

## Lecture One

### Introducing Argumentation and Rhetoric

**Scope:** In everyday usage, *argumentation* often has negative connotations, suggesting quarrelsomeness and unpleasantness. We must put this stereotype aside and examine argumentation in its classical sense—as the study of effective reasoning. This introductory lecture will explain just what this idea means. It also will relate argumentation to the field of rhetoric. *Rhetoric* is another term that has taken on pejorative connotations but that has a rich history as the study of how messages influence people. Argumentation is also related to two other terms, *logic* and *dialectic*, that will be explained in this lecture. With a clear understanding of the key terms, we will be ready to launch our study, and the lecture will preview the directions we will take.

### Outline

- I. Argumentation should be understood as the study of effective reasoning.
  - A. Popular conceptions of argumentation as unpleasant and quarrelsome need to be set aside.
  - B. Arguing is reason giving.
    1. Reasons are justifications or support for claims.
    2. The alternative to reason giving is to accept or reject claims on whim or command.
    3. Rationality is the ability to engage in reason giving.
  - C. To talk about *effective* reasoning is to imply concern for an audience.
    1. Arguments are not offered in a vacuum.
    2. Success ultimately depends on the assent of an audience.
    3. Assent, in turn, is based on acceptance of reasoning.
  - D. Seen in this light, argumentation is a common human activity.
    1. It is sometimes thought that, because everyone does it, argumentation does not require careful study.
    2. But the difference between productive arguments and destructive quarrels often is in the understanding of principles.
  - E. In a way, we will be engaged in the systematic study of common sense.
    1. We will learn a vocabulary that helps us to recognize and describe argumentation.
    2. We will become aware of the significance of choice and will broaden our understanding of the choices available to arguers.
    3. We will develop standards for appraising arguments and explaining what will make them better.
    4. We should improve our abilities both as analysts and as makers of arguments.

- II. Argumentation involves the production and exchange of messages in interaction with others.
- A. Sometimes our focus is on the messages, the products of argumentation.
    1. Messages are both explicit and implicit.
    2. They are capable of being cast in language.
    3. They are capable of structural and functional analysis and of critical appraisal.
  - B. Sometimes our focus is on the interaction, the process of argumentation.
    1. Argumentation is an interaction in which participants maintain what they think are mutually exclusive positions, and they seek to resolve their disagreement.
    2. They seek to convince each other, but at the same time, they are open to influence themselves.
    3. We study how they go about convincing others and how their efforts might be more productive.
- III. A focus on effective reasoning necessarily aligns our subject with the study of rhetoric.
- A. Today, rhetoric also often has negative connotations, including insincerity, vacuity, bombast, and ornamentation.
  - B. The classical understanding of rhetoric is very different.
    1. It focuses on the development and communication of knowledge between speakers and listeners.
    2. It is the study of how messages influence people.
    3. It arose as a field of study in ancient Greece.
    4. Until recent times, it occupied a central place in the academic curriculum.
  - C. "Thinking rhetorically" requires a certain frame of mind.
    1. It requires thinking in terms of an audience.
    2. It requires acknowledging audience predispositions and reasoning with them in mind.
    3. It requires awareness of choice by speakers and listeners.
    4. It requires recognizing that influence is noncoercive.
  - D. Argumentation, as we understand it, is that dimension of rhetoric that is concerned especially with influencing audiences through reasoning.
- IV. Argumentation is also related to two other themes.
- A. It is related to logic.
    1. Logic is often mistakenly seen as encompassing only formal symbolic and mathematical reasoning.
    2. In fact, logic is concerned with all structures of reasoning, whether formal or not.
    3. Informal logic is grounded in ordinary language and describes reasoning patterns that lack the certainty of mathematics.

- B. It is related to dialectic.
    1. Dialectic is often understood as the grand sweep of opposing historical forces, such as the clash between capitalism and communism.
    2. In fact, the term refers to a process of discovering and testing knowledge through questions and answers.
    3. Although Plato's dialogues are the models of dialectic, any conversation that is a critical discussion will qualify.
    4. Dialectic occurs in specific contexts and is governed by rules and conventions.
  - C. Argumentation can be seen as the field of study in which logic, dialectic, and rhetoric meet.
- V. This series of lectures will explore the nature of argumentation.
- A. We will begin by reviewing the historical development of the field and the differences between formal and informal reasoning.
  - B. We will then explore the constituents of a controversy.
  - C. From the macro level, we will shift to the micro level and focus on the parts of argument and how they work together.
  - D. We will then return to the macro level and examine how arguments are put together into cases, how cases are attacked and defended, and the significance of language and presentation.
  - E. We will investigate how argumentation functions in the personal, technical, and public spheres.
  - F. Finally, we will return to the abstract and consider the larger purposes that argumentation serves.

#### Essential Reading:

"Argumentation," in Thomas Sloane, ed., *Encyclopedia of Rhetoric*, pp. 33–37.  
 Chaim Perelman, *The Realm of Rhetoric*, pp. 1–20.

#### Supplementary Reading:

Daniel J. O'Keefe, "The Concepts of Argument and Arguing," in J. Robert Cox and Charles Willard, eds., *Advances in Argumentation Theory and Research*, pp. 3–23.

Wayne Brockriede, "Where Is Argument?" in Robert Trapp and Janice Schuetz, eds., *Perspectives on Argumentation*, pp. 4–8.

Frans H. van Eemeren et al., *Fundamentals of Argumentation Theory*, pp. 1–26, 98–102.

### Questions to Consider:

1. How have the pejorative connotations of *argumentation* and *rhetoric* limited our understanding of these fields of study?
2. If the audience ultimately is the judge of argument, how can we avoid equating sound argument with whatever happens to persuade a particular audience?

## Lecture Two

### History of Argumentation Studies

**Scope:** The study of argumentation can be traced back to the beginnings of rhetoric in classical Greece. To help citizens defend themselves in court, the Sophists taught techniques of argument. They were accused of divorcing technique from goals. Plato thought that this separation was an inherent difficulty, but Aristotle offered a systematic treatment that showed that the subject was worthy of study. During the early Renaissance, the subject matter of rhetoric was divided, with argumentation assigned to philosophy. The Cartesian method of reasoning, however, left little space for argumentation. Formal logic was held to be the highest form of reasoning, and argumentation tried to imitate it. Since the mid-twentieth century, though, theorists from different perspectives have identified weaknesses in the formal-logic model and have revitalized the study of argumentation.

### Outline

- I. Studies of argumentation and rhetoric trace their origins to classical Greece.
  - A. The immediate impetus was political.
    1. A tyrant, Thrasylbulus of Syracuse, had been overthrown.
    2. Citizens needed to know how to argue in court to recover property that had been seized by the tyrannical regime.
  - B. To meet this need, itinerant teachers began to lecture in Athens and the surrounding area.
    1. They were known as Sophists—and that was not a term of derision.
    2. One of the earliest Sophists was Protagoras, known as the “father of debate” because he taught that there were two sides to every question.
    3. Other prominent Sophists included Gorgias and Isocrates.
    4. The Sophists introduced the notion of commonplaces, mental storehouses where the materials of argument could be found.
  - C. The Sophists were accused of excessive concern for technique.
    1. It was charged that they regarded winning an argument as an end in itself, regardless of one’s purpose or the soundness of one’s position.
    2. Plato regarded these excesses as inherent in the subject of rhetoric itself.
  - D. Aristotle offered a systematic treatment of argumentation and rhetoric to demonstrate that the subject was legitimate and worth studying.
  - E. Argumentation was the foundation of rhetoric, the basis for attempts to influence others.

- II. With only minor adjustments, the Aristotelian synthesis continued to dominate the study of rhetoric during the Roman era and the medieval period.
  - A. Romans adapted the theory of the Greeks for pedagogical purposes.
    - 1. Rhetoric was often seen as a means of instruction.
    - 2. The subject was divided into invention, arrangement, style, memory, and delivery, with argumentation closely identified with the first two of these canons.
    - 3. Rhetoric was one of the seven liberal arts, and it focused on the training of the citizen-orator.
  - B. In the medieval period, the dominant social institution was the Church, so rhetoric came to be regarded as the study of preaching.
- III. Significant redirections of the subject occurred during the early Renaissance.
  - A. Peter Ramus bifurcated the canons, associating invention and arrangement with philosophy.
    - 1. Rhetorical scholars lost interest in argumentation.
    - 2. They instead developed elaborate systems for classifying figures of speech, gesture, and other stylistic devices.
  - B. Rene Descartes developed the method of systematic doubt, maintaining that one could reason only from self-evident premises.
  - C. These influences remained dominant for approximately 300 years.
    - 1. Reasoning became identified with the study of formal logic.
    - 2. Non-formal reasoning sought to emulate the certainty of formal logic.
    - 3. Within specialized fields, practitioners developed models of reasoning that were claimed to be deductive.
    - 4. Argumentation was seen, for the most part, as a demonstration of self-evident truth.
  - D. This trend reached its apex in the early twentieth century with the development of logical positivism in philosophy.
- IV. During the twentieth century, growing awareness of what these approaches omitted led to dissatisfaction with the models of reasoning.
  - A. The approach dismissed, to the realm of meaninglessness, attempts to make sense of some of the perplexities of modern life.
    - 1. It regarded statements of value as merely reports on the state of one's glands.
    - 2. It could not establish, for instance, that freedom was better than tyranny or that democracy was better than communism, because it excluded questions of this type from consideration.
  - B. The formal deductive model led to two "modern dogmas."

- 1. One was the dogma of scientism, holding that nonscientific claims, because they could not be verified or deduced, were nonsense and all of equal value.
- 2. One was the dogma of irrationalism, holding that non-formal questions could be decided only by force.
- C. Unhappiness with these alternatives led to reformulations of the concepts of reason and rationality and a revived role for rhetoric in the study of argumentation.
- V. Several intellectual influences of the past fifty years have encouraged this revival of interest.
  - A. Toulmin's attempt to explain ethical reasoning led to a more widely applicable model of non-formal reasoning.
  - B. Perelman's attempt to explicate how people reason about justice led him to the revival of a rhetorical theory based on argumentation.
  - C. Hamblin's challenge to the conventional wisdom regarding fallacies fueled the contemporary informal logic movement.
  - D. van Eemeren and Grootendorst, and others interested in the role of "dialogue logics," charted how argumentation occurs in informal settings.
  - E. Habermas and other social theorists emphasized the role of communication in the constitution of society and offered normative standards for argumentation under ideal speech conditions.
  - F. The "rhetorical turn" in specialized fields of study undermined deductive models and reestablished an active role for argument in shaping perceptions.
- VI. Today, argumentation is an exciting and vibrant field of study.
  - A. Though solidly grounded in a renewed understanding of rhetoric, it also has strong interdisciplinary appeal.
  - B. Breadth and interdisciplinarity have both positive and negative attributes.
  - C. The subject has both micro and macro levels and both product and process dimensions.

#### Essential Reading:

"Classical Rhetoric," in Thomas Sloane, ed., *Encyclopedia of Rhetoric*, pp. 92–115.

J. Robert Cox and Charles A. Willard, eds., *Advances in Argumentation Theory and Research*, pp. xiii–xlvi.

#### Supplementary Reading:

Michael A. Gilbert, *Coalescent Argumentation*, chapter 1.



**Questions to Consider:**

1. What might be some of the key trends in argumentation if Peter Ramus had not moved the subject from rhetoric to philosophy?
2. What are the similarities and differences between current approaches to the study of argumentation and those that were dominant in classical Greece?

## Lecture Three

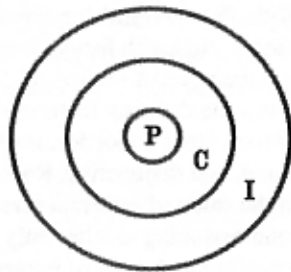
### Formal and Informal Argument

**Scope:** For much of the twentieth century, the systematic study of argumentation was associated with formal logic, which achieves deductive certainty at the price of limited relevance to everyday affairs. This lecture will review the defining features of deduction and induction and summarize three major forms of deductive reasoning: categorical, conditional, and disjunctive. Recent years have seen increased interest in the study of informal reasoning, which depends on probabilities. Informal reasoning is inherently uncertain, but it characterizes reasoning in most areas of human activity. The lecture will conclude by emphasizing why informal reasoning undergirds much contemporary study of argumentation.

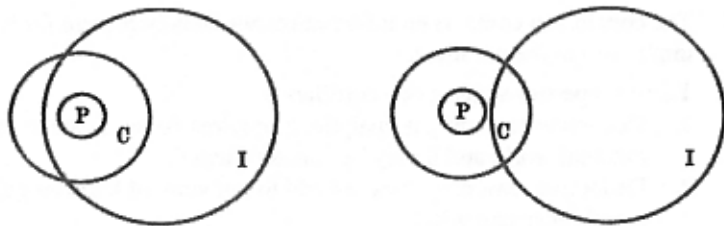
#### Outline

- I. Formal argument is deductive in nature.
  - A. The conclusion follows necessarily from the premises.
  - B. The conclusion contains no information not already present (at least implicitly) in the premises.
  - C. These properties suggest two corollaries.
    1. Deductive reasoning is analytic; it requires no reference to the external world and it may be counter-factual.
    2. Deductive reasoning does not add to our store of knowledge; it merely rearranges it.
- II. The basic unit of reasoning in formal argument is the syllogism, a structure consisting of two premises and a conclusion.
  - A. Categorical syllogisms contain statements that relate categories to other categories.
    1. The statements may be universal or partial.
    2. The statements may be inclusive or exclusive.
    3. The only terms that identify quantity are *all*, *some*, and *none*.
    4. The soundness of a categorical syllogism can be tested either by drawing Venn diagrams or by applying the rules of distribution.

All politicians are compromisers.  
 All compromisers are immoral.  
 All politicians are immoral.



All politicians are compromisers.  
 Some compromisers are immoral.  
 Are some politicians immoral?



- B. Conditional syllogisms begin with an “if-then” statement.
1. The “if” clause is called the *antecedent* and the “then” clause is called the *consequent*.
  2. The argument is sound if the antecedent is affirmed or if the consequent is denied.
  3. Conversely, denying the antecedent or affirming the consequent will not lead to a sound argument.
- C. Disjunctive syllogisms begin with an “either-or” statement.
1. The argument accepts or rejects one of the alternatives and draws a conclusion about the other.
  2. Rejecting one option always implies acceptance of the other.
  3. Whether accepting one option implies rejection of the other depends on whether *or* is used in an exclusive sense (one or the other but not both) or in a nonexclusive sense (one or the other or both); this distinction must often be determined from the context.

III. Although regarded as the model of argumentation for much of the twentieth century, formal reasoning is not seen as the prototype of argumentation in recent scholarship.

- A. Very seldom does one actually reason in syllogistic form.
1. The forms of statements cannot be separated from their context.
  2. We need finer gradations of quantity than *all*, *some*, and *none*.
- B. Most argumentation is not represented by a form in which the conclusion contains no new information.
1. Rhetorical reasoning involves enabling an audience to move from what is already known and believed to some new position.
  2. This movement involves a leap of faith that the arguer seeks to justify.

IV. Informal reasoning, therefore, functions as the model for everyday argumentation.

- A. The argument cannot be extracted from the language in which it is cast.
- B. The conclusion contains new information not present in the premises.
- C. The conclusion does not follow with certainty but relies on some degree of probability.
- D. The conclusion can be asserted with a high degree of confidence if the arguer adheres to the conventions of informal reasoning, which are based on accumulated experience.

**Essential Reading:**

“Logic,” “Syllogism,” in Thomas Sloane, ed., *Encyclopedia of Rhetoric*, pp. 450–456, 761–763.

Robert J. Fogelin and Walter Sinnott-Armstrong, *Understanding Arguments*, pp. 115–199.

**Supplementary Reading:**

Ralph H. Johnson, *Manifest Rationality*, chapter 3.

Ray E. McKerrow, “Rationality and Reasonableness in a Theory of Argumentation,” in J. Robert Cox and Charles Arthur Willard, eds., *Advances in Argumentation Theory and Research*, pp. 105–122.

**Questions to Consider:**

1. Under what circumstances can an argument that proceeds from general to specific be inductive? Under what circumstances can an argument that proceeds from specific to general be deductive?
2. Is informal reasoning a weaker mode than formal reasoning? Why or why not?

## Lecture Four

### The Emergence of Controversy

**Scope:** The fundamental assumption of argumentation is that it occurs in the presence of controversy. Controversies emerge when previously accepted assumptions are challenged or when new situations present themselves and decisions are required in the face of uncertainty. Although it has some earmarks of an adversarial procedure, argumentation is ultimately a cooperative enterprise. Engaging in argumentation entails the risk of being proved wrong and the risk of having to alter one's belief system. Advocates run these risks because they seek reflective judgment, not just compliance with their wishes. The lecture also will examine the conditions that give rise to controversies and the conditions under which controversies are resolved.

#### Outline

- I. People argue—that is, they engage in reason giving—when certain conditions are met.
  - A. Some controversy or disagreement exists between them.
  - B. The controversy is nontrivial.
  - C. The assent of the other party is desired; therefore, one cannot simply abandon the situation.
  - D. Assent is desired only if it is freely given.
    1. Respect for the other party makes this criterion essential.
    2. Our desire for confidence in the result also requires this condition.
  - E. No easier means exists for resolving the disagreement.
    1. We cannot use empirical methods.
    2. We cannot consult a universally recognized authority.
    3. We cannot deduce the answer with certainty from what we already know.
  - F. In short, we argue about significant controversies that are inherently uncertain; we argue about that which could be otherwise.
- II. Arguing, although it has adversarial elements, is fundamentally a cooperative enterprise.
  - A. A person who argues accepts risks.
    1. The person risks being shown to be wrong, which can be unsettling and can involve loss of face.
    2. The person also risks having to alter his or her belief system to take into account something new.
    3. The parties in an argument assume these risks mutually.

- B. Risks are run because the parties desire reflective judgment about the matter at hand.
    1. Judgment is needed because absolute proof is not possible, yet decisions must be made.
    2. Judgment is sought by giving sufficient reason that a critical listener would feel justified in accepting the claim.
    3. Adherence of the critical listener becomes the substitute for absolute proof.
  - C. Arguing is a process, analogous to the scientific method, for determining what one believes is true about matters that are uncertain and contingent.
  - D. All parties in a dispute cooperate in using argumentation as the means to decide what they believe is true.
    1. They share some level of agreement on which their disagreement is built.
    2. They share a common language.
    3. As arguers, they share modesty, respect for the audience, and recognition of the importance of free assent.
    4. As audiences, they share a willingness to listen and to risk being convinced.
  - E. In summary, the parties in a controversy cooperatively use argumentation as a means of reaching judgments in which they will have confidence.
- III. How do controversies begin?
- A. We can consider some sample statements that might be made in conversation.
    1. In August 2001, George W. Bush was President of the United States.
    2. The Teaching Company sells this course for \$39.95.
    3. The red tie is prettier than the blue one.
    4. The city government is unsatisfactory.
    5. Capital punishment is murder.
    6. Congress ought to pass the president's budget.
  - B. With respect to each of these statements, how would you know that the author was right?
    1. In some cases, as in #1, we could rely on common knowledge.
    2. In some cases, as in #2, we could rely on widely shared empirical methods.
    3. In some cases, as in #3, we could rely on personal judgment or taste.
    4. In some cases, as in #4–6, further discussion will be required.
  - C. The answer will determine what sort of response one is likely to make to each of the six statements.

1. The response may be nonargumentative, such as silence or immediate assent or denial.
  2. Nonargumentative responses will occur when the matter is trivial, there is a wide consensus, or the subject is so emotionally intense that discussion is not possible.
- D. If the response is "How do you know?" or "What do you mean?" the maker of the statement must answer by supplying reasons that will be assessed and responded to.
1. If the reasons are deemed satisfactory, the argument then will stop.
  2. If not, the arguer will need further elaboration of the reasons or the introduction of additional reasons that satisfy the objections.
  3. This situation will be especially likely to occur when previously accepted assumptions are challenged or when new situations present themselves.
- E. We should not assume that controversy is necessarily bad or that all controversies should be resolved as quickly as possible.
1. Controversies open alternative possibilities and ways of thinking.
  2. Controversies make clear the implications of one choice or another.
  3. Controversies expose ideas or viewpoints that may ultimately prevail.
  4. Controversies sensitize us to the complexity of events.

#### IV. How do controversies end?

- A. Sometimes the parties reach a common understanding or judgment.
- B. Sometimes time runs out and a third party renders a judgment that the participants agree to accept.
- C. Sometimes the controversy is overtaken by events that render it moot or that point the way toward resolution.
- D. Sometimes a conceptual breakthrough occurs that results in looking at the situation from a different perspective.
- E. Sometimes the controversy will continue.
  1. The same underlying dispute may be raised by different surface concerns.
  2. The concepts may be "essentially contested," with the result that the controversy is perpetual.

#### Essential Reading:

"Controversy," in Thomas Sloane, ed., *Encyclopedia of Rhetoric*, pp. 169–171.  
 Thomas B. Farrell, "Knowledge, Consensus, and Rhetorical Theory," *Quarterly Journal of Speech* (February 1976), pp. 1–14.

#### Supplementary Reading:

Craig Calhoun, ed., *Habermas and the Public Sphere*.

#### Questions to Consider:

1. What are the benefits of reflective judgment as opposed to other means of reaching decisions? Are the benefits worth the risks assumed by arguers?
2. How are productive controversies different from those that are merely contentious or quarrelsome?

## Lecture Five

### Resolutions and Issues

**Scope:** This lecture concerns the substance of a controversy—what it is about. Although the precise question in dispute is often implicit, it can be stated in the form of a resolution, ideally in a single declarative sentence. Doing so clarifies what is at issue for the participants and enables the analyst to classify the resolution and determine its proof requirements. There are four basic types of resolutions: fact, definition, value, and policy. Knowing the resolution will help one to identify the issues, the subsidiary matters that must be established satisfactorily if the resolution is to prevail. An aid to identifying the issues in a given case is found through the concept of *topoi*, or “places.” These are categories of issues always raised in addressing resolutions of a given type.

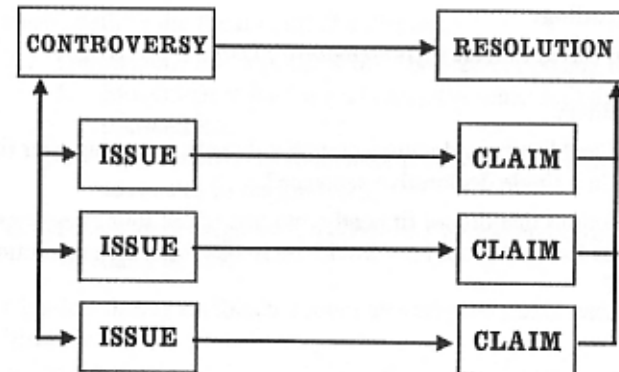
#### Outline

- I. The resolution is a statement capturing the substance of the controversy.
  - A. It is the ultimate claim on which judgment is sought.
  - B. It may be explicitly stated or it may be implicit in the discourse of the participants.
  - C. The resolution should be capable of expression in a single declarative sentence.
    1. It should be recognizable by all participants in a dispute.
    2. Inability to state a resolution, or the presence of multiple resolutions, is a sign of an unclear argument and a predictor of difficulties.
- II. There are four major types of resolutions.
  - A. Resolutions of fact involve description.
    1. They concern matters that, in theory, can be described and verified independently.
    2. They may relate to the past, present, or future.
  - B. Resolutions of definition involve interpretation.
    1. They place concepts in categories and provide perspective.
    2. This interpretation is important because definitions are not neutral.
  - C. Resolutions of value involve judgment.
    1. Judgment represents an appraisal or evaluation.
    2. The evaluation can be absolute or comparative.
    3. It can involve instrumental or terminal values.
  - D. Resolutions of policy involve action.

1. They are assertions about what should be done.
  2. They are characteristic of deliberative bodies, such as Congress.
- E. Classifying resolutions is important because the proof requirements differ for different types of resolutions.

#### III. Issues are implicit in the resolution.

- A. A precise definition of *issue* is important.
  1. The term is used loosely in everyday language.
  2. Issues are questions inherent in a controversy and vital to the success of the resolution.
- B. Issues can be located in different ways.
  1. They can be located by examining the text of the resolution.
  2. They can be located by examining the underlying context.
  3. They can be derived from a pattern of claims and responses.
- C. Potential issues minus uncontested issues equals actual issues.



#### IV. *Topoi* (“stock issues”) offer a “shortcut” to locating issues in a given case.

- A. *Topoi* (literally, “places”) are issues always raised in addressing resolutions of a given type.
  1. They are recurrent patterns of analysis.
  2. As noted above, by classifying the resolution into a certain type, we can determine the *topoi* for it.
- B. For resolutions of fact, the *topoi* can be identified.
  1. What is the criterion for assessing truth?
  2. Has the criterion been satisfied?
- C. For resolutions of definition, the *topoi* can be identified.
  1. Is the interpretation relevant?
  2. Is it fair?
  3. How should we choose among competing interpretations?

- D. For resolutions of value, the *topoi* can be identified.
  1. Is the value truly good or bad as alleged?
  2. Which among competing values should be preferred?
  3. Has the value been properly applied to the specific situation?
- E. For resolutions of policy, the *topoi* can be identified.
  1. Is there a problem?
  2. Where is credit or blame due?
  3. Will the proposal solve the problem?
  4. On balance, will the proposal be better?

**Essential Reading:**

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate*, pp. 35–49.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 41–62.

**Supplementary Reading:**

J. W. Patterson and David Zarefsky, *Contemporary Debate*, pp. 16–27.

**Questions to Consider:**

1. What is gained and lost by reducing a complex dispute occurring over time to a resolution in a single declarative sentence?
2. Are there resolutions that do not fit neatly into one of the four categories presented in this lecture? If so, how would the issues for such a resolution be determined?

**Lecture Six**

***Stasis*—The Focal Point of Dispute**

**Scope:** *Stasis* refers to the focal point of dispute, the point at which contending positions meet. It is determined by the choices advocates make about what to stipulate and what to contest. This lecture will explain the concept, which is drawn from ancient theories of rhetoric. It will identify the four classical *stases*—conjecture, definition, quality, and place—and will illustrate each with examples of controversies. The concept, originally developed for legal disputes, will be treated more broadly and rendered applicable to policy controversies as well. Finally, employing the concept of *stasis* is useful both for the arguer and for the analyst of argument.

**Outline**

- I. *Stasis* defines the focal point of a dispute.
  - A. The term means “a point of rest” between opposing forces.
    1. Movement toward a goal cannot resume until the opposition is transcended.
    2. *Stasis* enables us to identify precisely what is in dispute and invites advocates to respond to it.
  - B. The concept originates in classical rhetoric and originally was designed for courts of law.
- II. Classical theory established four categories of *stasis*, each of which will be illustrated.
  - A. *Stasis* in conjecture concerns whether an act occurred.
  - B. *Stasis* in definition concerns what the act should be called.
  - C. *Stasis* in quality concerns whether the act is justified.
  - D. *Stasis* in place concerns whether the discussion is occurring in the proper forum.
- III. Several features of the *stasis* categories deserve mention.
  - A. What determines the *stasis* is not the original assertion but the response to it.
    1. One may respond to a claim in a variety of ways.
    2. The specific response, together with the original claim, will identify just what is at issue and, hence, where the *stasis* lies.
  - B. Generally speaking, *stasis* is progressive.
    1. *Stasis* in definition implicitly concedes conjecture.
    2. *Stasis* in quality implicitly concedes conjecture and definition.

3. Hence, an advocate should select a *stasis* as close to the beginning of the chain as can be sustained.
4. Presenting multiple *stases* is better than shifting from one to another during the course of the argument.

C. As an exception to the above principle, *stasis* in place is preemptive.

IV. The concept of *stasis* can be adapted to non-legal arguments.

- A. Multiple issues are in play, each with its own *stasis*.
- B. One popular model applies conjecture, definition, and quality to each of the four *topoi* for a resolution of policy.
  1. The *topoi* can be identified as *ill*, *blame*, *cure*, and *cost*.
  2. The result is a four-by-three matrix with twelve possible *stases* (ill-conjecture, ill-definition, and so on).

### *stasis*

*topoi*

	CONJECTURE	DEFINITION	QUALITY
ILL			
BLAME			
CURE			
COST			

- C. *Stasis* in place usually is not applicable.
- D. An example of a dispute will help us to identify various possible *stases*.

V. The concept of *stasis* has multiple uses.

- A. For the analyst, it enables one to locate the center of the dispute.
- B. For the arguer, it has multiple uses.
  1. It permits strategic choices about alternative means to respond to a given situation.
  2. It avoids the tendency of arguers to "talk past each other."

#### Essential Reading:

"*Stasis*," in Thomas Sloane, ed., *Encyclopedia of Rhetoric*, pp. 741–745.

Edward P. J. Corbett and Rosa A. Eberly, *The Elements of Reasoning*, 2<sup>nd</sup> ed., pp. 26–120.

#### Supplementary Reading:

Antoine Braet, "The Classical Doctrine of *Status* and the Rhetorical Theory of Argumentation," *Philosophy and Rhetoric* (1987), pp. 79–93.

Ray Nadeau, "Hermogenes' *On Stases*: A Translation with an Introduction and Notes," pp. 361–424.

#### Questions to Consider:

1. Why is *stasis* more complex when applied to policy disputes than to legal controversies?
2. If the participants in a dispute have different opinions about where *stasis* lies, how can the dispute proceed?

## Lecture Seven

### Presumption and Burden of Proof

**Scope:** Once the resolution and issues have been identified, whose responsibility is it to prove what? This lecture addresses that question by considering the interrelated concepts of presumption, burden of proof, and burden of rejoinder. Presumption is a descriptive concept; it identifies who will prevail in the absence of controversy but does not assume that this position is somehow "right." Burden of proof is the opposite of presumption; it determines who has the ultimate responsibility with regard to the resolution. The assignment of presumption and burden of proof is sometimes itself controversial, because holding presumption has a strategic advantage. Once an initial argument has been advanced, the burden of rejoinder comes into play. This is the responsibility to keep the dispute moving forward, and it is shared by all parties. Finally, the lecture considers what *proof* means in the context of everyday argumentation.

#### Outline

- I. Presumption is a descriptive concept.
  - A. It determines who will prevail in the absence of controversy.
    1. It can be thought of as "pre-occupation of the ground."
    2. This is not an evaluative judgment, however.
  - B. Theorists distinguished between natural and artificial presumption.
    1. Natural presumptions include those against paradox and against restrictions on freedom, for instance.
    2. Artificial presumptions are those stipulated by convention.
    3. The presumption in favor of existing institutions is a complex and sometimes controversial presumption; it is not clear whether it is natural or artificial.
  - C. Presumption serves important functions.
    1. It determines who must initiate the dispute.
    2. It establishes the minimum threshold of proof that is required.
    3. It can provide a standard for determining the outcome.
- II. Burden of proof is the opposite of presumption.
  - A. It is the ultimate responsibility to support one's position on the resolution.
    1. It is analogous to the persuasion burden in law.
    2. This burden does not shift.
  - B. Burden of proof is sometimes confused with two related concepts.
    1. The burden of proving assertions rests with any advocate making any claim.
    2. The burden of rejoinder, discussed below, is the responsibility to carry the dispute forward.
- III. The allocation of presumption and burden of proof in a controversy is of great importance.
  - A. There is strategic advantage to holding the presumption.
  - B. Several examples illustrate how advocates sometimes jockey for presumption.
    1. They may define a situation as a crisis.
    2. They may offer the first proposal.
    3. They may associate their position with a preferred value.
  - C. The alternative to jockeying for presumption is to stipulate where it rests.
    1. This is the function of many rules in law, such as "innocent until proven guilty."
    2. This is sometimes embodied in legislative requirements, such as environmental impact statements.
    3. This is sometimes evident in commercial transactions, such as a grace period to cancel purchasing decisions.
  - D. One traditional stipulation, that presumption rests with prevailing institutions, is controversial.
    1. The stipulation assumes that change is not an inherent good and that people naturally avoid risks.
    2. It has been alleged that this view merely enshrines conservative politics and ought to be challenged.
  - E. The strength of presumption is relative to the consequences of being wrong.
- IV. Once an initial argument has been advanced (unless it is self-defeating on its face), the burden of rejoinder comes into play.
  - A. This is the burden to keep the discussion going, analogous to the production burden in law.
  - B. This burden shifts back and forth between the arguers.
  - C. This burden has two important functions.
    1. It serves to keep the argument from stopping.
    2. It prevents simple repetition of a position without extension.
- V. The burden of rejoinder is met by offering proof.
  - A. Rhetorical proof involves interaction in which speaker and listeners reason together.
  - B. Proof offers support for a claim but (as we have seen) does not absolutely ensure its truth.



- C. Proof is reasonable if it would be taken seriously by a broad and diverse group of listeners exercising their best critical judgment.

**Essential Reading:**

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate*, pp. 35–49.

David Zarefsky, *Public Speaking: Strategies for Success*, pp. 152–156.

**Supplementary Reading:**

J. W. Patterson and David Zarefsky, *Contemporary Debate*, pp. 27–29.

**Questions to Consider:**

1. How do controversies about affirmative action illustrate the significance of presumption? What does each side in these controversies assume is the placement of presumption?
2. Is rhetorical proof stronger than, weaker than, or the same as proof in science? What factors make the standard for rhetorical proof particularly rigorous?

## Lecture Eight

### Argument Analysis and Diagramming

**Scope:** With this lecture, we change our focus from the macro level (general considerations about argumentation and the structure of controversies) to the micro level, in which the unit of analysis is the individual argument. The lecture reviews how the process of arguing produces individual arguments. Then it will present the basic structure of an argument, consisting of a claim, evidence for it, and an inference linking the evidence and the claim. These are not always apparent in actual arguments, but they can be extracted and diagrammed for purposes of argument analysis and appraisal. There is dispute about whether diagramming distorts the nature of arguments; this dispute will be reviewed briefly at the end of the lecture.

#### Outline

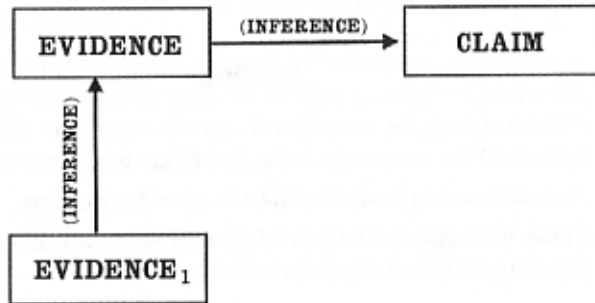
- I. We now move from the macro level—to which we shall return in the last few lectures of the series—to the study of individual units of argument.
  - A. A resolution can be divided into its subsidiary claims.
  - B. These are supported by individual arguments, which will be the focus of attention for the next several lectures.
- II. It is important to understand how the process of arguing produces arguments.
  - A. An advocate advances a claim, which may or may not be accepted immediately.

**CLAIM**

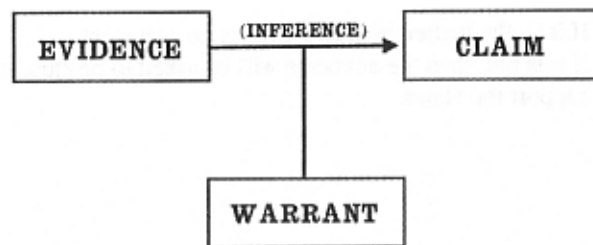
1. If it is, the matter ends and there is no argument.
2. If it is not, then the advocate will be asked to produce evidence to support the claim.



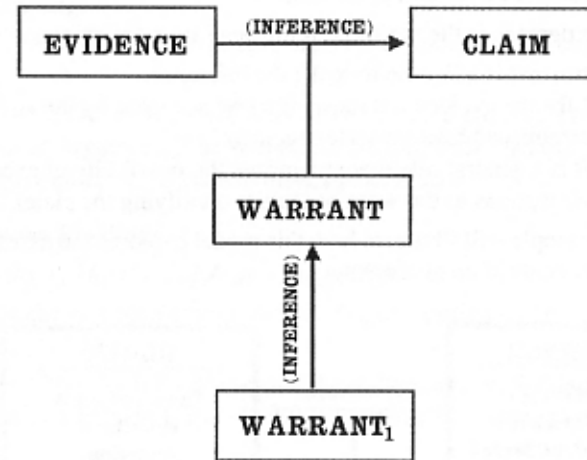
- B. If the evidence is not immediately accepted, then one of two things will happen.
1. If the truth of the evidence is in dispute, then a separate argument is advanced to establish it.



2. If the truth of the evidence is accepted but it is not seen as justifying the claim, then a warrant is provided for the inference from evidence to claim.



- C. If the warrant is not accepted, then there will be a separate argument to back it up.



- D. Exceptions may be noted and the claim may need to be qualified.
- E. This process continues until the arguers reach agreement or the dispute is resolved by a third party.

III. Understanding how arguments are produced also enables us to analyze discourse and identify the arguments.

- A. We can identify claims, evidence, inferences, and the warrants for them.
- B. These will not always be explicit, but they can be extracted from a dispute.
- C. In doing so, we develop a working model of argument, as an example will illustrate.

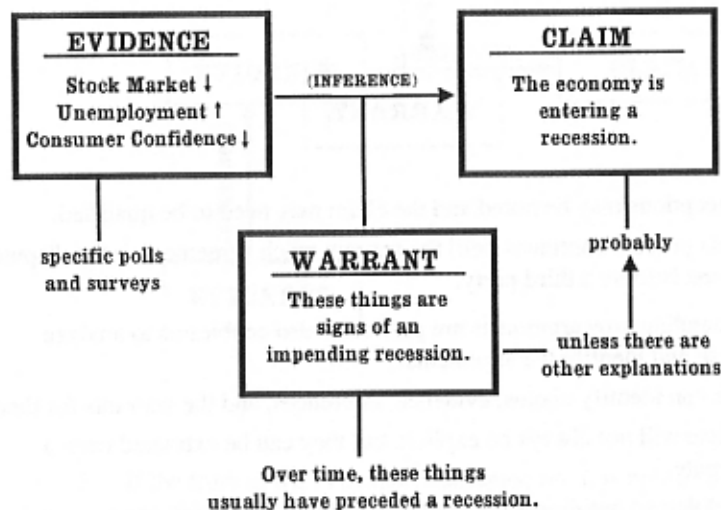
IV. The model suggested by formal logic—the analytic or categorical syllogism—is not appropriate for everyday argumentation.

- A. As we discussed in Lecture Three, it is a model of deduction, but most arguments are not deductive.
- B. Few statements are true or false without reference to context.
- C. The standards for assessing arguments vary depending on their subject matter.
- D. We need finer distinctions than “all,” “some,” and “none.”

V. A more appropriate model can be adapted from the writing of a contemporary philosopher, Stephen Toulmin.

- A. Claims are the statements we want listeners to believe and act on.

- B. Evidence represents the grounds for making the claim.
  - 1. It is not identical to the claim but is used to support it.
  - 2. It must be accepted by the audience, or a separate argument will be required to establish its truth.
- C. The inference is the main proof line leading from evidence to claim.
- D. The warrant is a license to make the inference.
  - 1. Like the evidence, it must either be accepted by the audience or established by a separate argument.
  - 2. It is a general rule that recognizes the possibility of exceptions.
  - 3. Exceptions to the warrant require qualifying the claim.
- E. An example will illustrate how this model captures the essential components of an argument.



- VI. Although they are useful for pedagogical purposes, the use of argument models and diagrams has been criticized.
  - A. Models are instruments for identifying and analyzing arguments, not necessarily for constructing them.
  - B. Models “abstract out” subtle features of language, emphasis, and presentation that are integral to actual arguments.
  - C. Models suggest linearity of movement from evidence to claim that often is not characteristic of actual arguments.
  - D. Nevertheless, argument models are helpful if properly used.
    - 1. They help us to identify the components of an argument.
    - 2. They alert us to the internal dynamics of the argument.

- 3. They permit “translation” of different arguments into a common form to make comparisons easier.

#### Essential Reading:

Frans H. van Eemeren et al., *Fundamentals of Argumentation Theory*, pp. 129–149.

Charles Arthur Willard, “On the Utility of Descriptive Diagrams for the Analysis and Criticism of Arguments,” in William L. Benoit, Dale Hamble, and Pamela J. Benoit, eds., *Readings in Argumentation*, pp. 239–257.

#### Supplementary Reading:

Stephen Toulmin, *The Uses of Argument*, pp. 94–145.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 107–111.

Dale Hamble, “The Toulmin Model and the Syllogism,” in William L. Benoit, Dale Hamble, and Pamela J. Benoit, eds., *Readings in Argumentation*, pp. 225–238.

#### Questions to Consider:

- 1. How does the diagram of an argument make clear that disagreements must be built on some level of agreement?
- 2. How can the limitations of argument diagrams be minimized so that the diagrams will assist in the analysis and evaluation of arguments?

## Lecture Nine

### Claims and Evidence

**Scope:** Having overviewed the elements of an argument, we now will spend several lectures exploring them in more detail. This lecture focuses on two of the basic components. Earlier treatment of the resolution is drawn on to establish the characteristics of argument claims. Evidence is the supporting material for the claim and must be agreed to by the arguers. Evidence can be categorized in several ways, but we will focus on three types. Objective data can be independently established and are widely agreed to. Social consensus includes the audience beliefs that are accepted as true statements by those in the controversy. Finally, a person's credibility can serve as support for his or her claims. Although this lecture discusses normative standards for evidence, in actual arguments, the participants sometimes settle for less.

#### Outline

- I. What we have studied earlier about resolutions applies more generally to claims.
  - A. A resolution, after all, is a claim—the ultimate claim in the controversy, which the audience will be asked to accept or reject.
  - B. The first step in analyzing a controversy is to identify the claims.
    1. This enables us to assess their importance and to determine what is needed to support them.
    2. We identify not only the resolution but also the subsidiary claims on which the resolution depends.
  - C. Like the resolution, all claims may be considered as claims of fact, definition, value, or policy.
  - D. Like the resolution, different types of claims will raise different issues.
  - E. Like the resolution, claims should be capable of being expressed in a clear and succinct declarative sentence.
- II. Evidence represents the grounds for a claim.
  - A. It answers the question “How do you know?” or “What do you have to go on?”
  - B. It should be agreed on by all participants.
    1. It thereby serves as a secure starting point for the dispute.
    2. If it is contested, discussion of the claim stops until the matter is settled.
    3. Settling the matter requires a separate argument in which the original evidence now functions as a claim.
- III. Objective data can be independently established and are widely agreed to.
  - A. Examples are one form of objective data.
    1. Brief mention of an instance, without development, is one kind of example.
    2. Illustrations are fully developed instances.
    3. Generalizations from instances may be stated or implied.
  - B. Statistics are a form of objective data.
    1. Raw numbers are the most simple statistics.
    2. Measures of central tendency include the mean, the median, and the mode.
    3. Probability statements (including the outcome of controlled studies and experiments) are another form of statistics.
  - C. Tangible objects and historical documents are other forms of objective data.
  - D. Objective data include testimony of fact and opinion.
    1. The statements themselves are not necessarily objective.
    2. That the statements are made constitutes objective data.
  - E. For each of these types of objective data, potential problems exist that might cause listeners not to accept the evidence.
- IV. Social consensus consists of beliefs that function as if they were facts.
  - A. “Common knowledge” is a type of social consensus.
  - B. Shared value judgments are a type of social consensus.
  - C. Previously established conclusions are a type of social consensus.
  - D. Stipulations in the specific discussion are a type of social consensus.
  - E. Differences in core values or common knowledge will need to be resolved before social consensus can be accepted as evidence.
- V. Credibility of a person can serve as evidence for claims the person makes.
  - A. The classical concept of *ethos* is the basis of credibility.
  - B. Credibility is a function of competence, trustworthiness, good will, and dynamism.
  - C. Credibility can be established for oneself or derived from the use of other credible sources.
    1. Eyewitness access to information will make one a credible source.
- C. We must understand what is required for evidence to be agreed on.
  1. Sometimes, there are technical rules, as in law.
  2. In ordinary usage, the test is what a critical audience would accept.
  3. Speech-act philosophy provides an operational definition of “providing evidence.”
- D. Common types of evidence can be grouped under the headings of objective data, social consensus, and credibility.

2. Background and training will make one a credible source.
  3. A good track record will make one a credible source.
- D. Several factors may place credibility in doubt and require a separate argument to establish the evidence.
1. Is the person an authority on this subject?
  2. Is there a clear basis on which the person reached the conclusion?
  3. Does the person have a bias or vested interest?
  4. Do credible sources disagree?
- VI. Although our concerns are normative, we should note that actual audiences often have looser standards for evidence.
- A. Judgments of quality of evidence are affected by agreement or disagreement with the claim.
  - B. Judgments of quality of evidence are affected by a speaker's delivery.
  - C. Judgments of quality of evidence are affected by familiarity with the source and the judgment of the person using the evidence.
  - D. Evidence is most influential when an audience is unfamiliar with the material and when the goal is sustained attitude change over time.

#### Essential Reading:

Austin J. Freeley and David L. Steinberg, *Argumentation and Debate*, chapters 6–7.

“Social Knowledge,” in Thomas Sloane, ed., *Encyclopedia of Rhetoric*, pp. 721–724.

#### Supplementary Reading:

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 123–143, 187–202.

Robert P. Newman and Dale R. Newman, *Evidence*.

#### Questions to Consider:

1. When would each of the categories mentioned in the lecture—objective data, social consensus, and credibility—serve as the best type of evidence?
2. If audiences have looser standards for evidence than those discussed in this lecture, what role should normative standards of evidence play in actual controversies?

## Lecture Ten

### Reasoning from Parts to Whole

**Scope:** The next four lectures will focus on inferences (and the warrants for them), because they are the most complex part of an argument. Six common inference patterns will be reviewed: example, cause, sign, analogy, narrative, and form. This lecture concerns inferences from example. These are used to relate specific cases to more general claims and to apply general statements to specific cases. Unless the enumeration is complete, this form of inference depends on probabilities and, therefore, is subject to error. The lecture will identify some of the common errors in this pattern of inference.

#### Outline

- I. The next four lectures will examine specific types of inference and the warrants for them.
  - A. Inferences offer proof for a claim, but they do not establish it with certainty.
  - B. Consequently, we need to examine not only what the inference is and how it works but also some of the tests that will help us to know in a particular situation whether it is a strong inference.
  - C. We will examine six major patterns of inference: example, cause, sign, analogy, narrative, and form.
- II. Generalization uses the inference from example to derive a general statement from one or more specific examples.
  - A. The warrant is that what is true of the part is probably true of the whole.
    1. If the enumeration were complete, this would be true with certainty.
    2. Because the enumeration is usually incomplete, the assumption is that the examples are representative of the whole.
  - B. Generalizations usually follow one of two patterns.
    1. A statistical generalization draws a sample from a larger population and argues that what is true of the sample is true of the whole population.
    2. An anecdotal generalization cites several specific instances, then draws a conclusion about the entire category.
  - C. Each of these patterns is subject to specific tests.
    1. For the statistical generalization, the tests are sample size and representativeness.

2. For the anecdotal generalization, the tests are number and range of examples, presence or absence of significant counterexamples, and representativeness.
  - D. Any generalization should be tested for the fallacy of composition (assuming that what is true of the part is necessarily true of the whole).
- III. Classification uses the inference from example to derive a specific application from a general principle.
- A. The warrant is that what is true of the whole is probably true of the part.
    1. If the general principle were derived by complete enumeration, this would be true with certainty.
    2. Because that is seldom the case, the assumption—as with generalization—is that the parts are representative of the whole.
  - B. The effect of classification is to increase the salience of an abstract claim by making it more concrete.
  - C. Like generalizations, classifications are subject to tests.
    1. Does the particular member really belong in the general class?
    2. Is there reason to think that the particular member is an exceptional case?
  - D. Any classification also should be tested for the fallacy of division (assuming that what is true of the whole is necessarily true of the part).

**Essential Reading:**

Chaim Perelman, *The Realm of Rhetoric*, pp. 106–110.

David Zarefsky, *Public Speaking: Strategies for Success*, pp. 156–161.

**Supplementary Reading:**

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 111–112.

**Questions to Consider:**

1. Public opinion polls often rely on very small samples. How are they able to do so and permit confident generalizations?
2. Under what circumstances is the whole not equal to the sum of the parts? Why are these situations likely to incur the fallacy of composition or division?

## Lecture Eleven

### Moving from Cause to Effect

**Scope:** Causal inferences assert that one factor has influence over another. *Influence* must be inferred because it cannot be observed directly. The lecture will consider different meanings of the concept of causation, different purposes for which causal inferences are used, and different approaches that have been used to infer the existence of causal influence. The reasoning process sometimes proceeds from cause to effect (as in the case of predictions) and sometimes from effect to cause (as in the case of accounts or explanations of behavior). Causal inferences follow with probability, not certainty, and the lecture will conclude by discussing some of the factors that can undermine a causal inference.

#### Outline

- I. Causal inferences identify and explain relationships.
  - A. They assert that one phenomenon has influence on another.
    1. Influence cannot be observed but is inferred.
    2. Causal inferences, as we shall see, are more potent than sign inferences, which we will discuss in the next lecture.
    3. Yet the claim does not follow absolutely because the inference may be in error.
  - B. The term *cause* has different meanings.
    1. It may mean “sufficient condition” for the effect.
    2. It may mean “human action” or intervention in the natural order.
    3. It may mean “the abnormal.”
  - C. Which meaning of *cause* is appropriate in any given case may depend on the use to which the argument is put.
    1. Causal inferences are used to predict events.
    2. Causal inferences are used to relate means to ends; this is sometimes called the *pragmatic argument*.
    3. Causal inferences are used to explain paradoxes.
    4. Causal inferences are used to assign responsibility.
- II. Different procedures may be used to determine causality.
  - A. Empirical approaches rely on the tests for sufficient condition developed by John Stuart Mill.
    1. Create conditions in which two things are identical in every respect but one.
    2. Observe whether there is a difference between the two things.

3. If so, infer that the one respect in which the two things varied is the cause of the difference.
- B. Quantitative approaches rely on statistical regression analysis, which explains how much of the variance between things is attributable to each factor identified.
- C. Rhetorical approaches rely on a two-stage argument to back up the inference.
1. The first step is to identify how some factor possibly could be the cause.
  2. The second step is to explain why it ought to be considered the cause.
  3. When human action is involved, the first step establishes means and opportunity; the second step establishes motive.

III. Causal inferences should satisfy several tests.

- A. Has a correlation been confused with a causal relationship?
- B. Is there some common cause that is masked by the appearance of a cause-effect relationship?
- C. Has temporality been confused with causality (the *post hoc* fallacy)?
1. The cause must precede the effect.
  2. Preceding the effect, though, is not a sufficient condition for something to be a cause.
- D. Are there significant multiple causes or multiple effects?
1. An effect might have multiple causes, in which case treating only one of them might not alter the presence of the effect.
  2. A cause might have multiple effects, in which case affecting all of them might produce unintended consequences.
- E. Have cause and effect been reversed?
- F. Are there significant intervening or counteracting causes?
1. An intervening cause is one that mediates or deflects causal force.
  2. A counteracting cause is one that reverses causal force.
  3. Either will reduce the causal force that is brought to bear on the alleged effect.

**Essential Reading:**

Chaim Perelman, *The Realm of Rhetoric*, pp. 81–89.

David Zarefsky, *Public Speaking: Strategies for Success*, 3<sup>rd</sup> ed., pp. 166–171.

**Supplementary Reading:**

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and Critical Decision Making*, pp. 113–114.

David Zarefsky, “The Role of Causal Argument in Policy Controversies,” in David A. Thomas and John P. Hart, eds., *Advanced Debate*, pp. 115–131.

**Questions to Consider:**

1. Why are we so often eager to establish causality even though it can be known only by inference?
2. Is the process for establishing causality rhetorically too rigorous or not rigorous enough? Is there a danger that we will reject true causes or accept false causes? If so, how might this danger be minimized?

## Lecture Twelve

### Establishing Correlations

**Scope:** Causal inferences often are confused with inferences from sign, the focus of this lecture. Sign inferences establish that there is a relationship between two factors, so that one can be predicted from knowledge of the other. This relationship is called *correlation*. Unlike causal inferences, though, sign inferences do not account for the relationship. Because sign inferences are fallible, the inference depends on probability. Sign arguments are used to infer the unknown from the known, to predict outcomes, and to rely on the judgment of expert authorities. The lecture concludes by considering pitfalls to avoid in making sign inferences.

#### Outline

- I. Inferences from sign, unlike causal inferences, assert a predictable relationship between variables without accounting for it.
  - A. This relationship is called a correlation: changes in one variable enable us to predict changes in the other.
  - B. As we have seen, sign inferences are less potent than causal inferences.
  - C. Sign inferences often relate things that belong to different levels of abstraction, different degrees of specificity, or different spheres of thought.
  - D. The prototype case is a characteristic or property that is regarded as a sign of some deeper, underlying essence.
  - E. Aristotle distinguished between fallible and infallible signs.
    1. If a sign were truly infallible, the relationship posited by the argument could be asserted with certainty.
    2. Because there are few, if any, infallible signs, the inference depends on probability and could be mistaken.
- II. Sign arguments are commonly used for a variety of purposes.
  - A. They are used to infer the unknown from the known.
    1. Many constructs are unknowable abstractions, such as intelligence, economic health, and happiness.
    2. Statistical indexes and other measurements are widely used as signs of these abstractions.
  - B. They are used to predict outcomes when it is not necessary to explain the reason for the outcomes.
    1. We might observe a correlation between a practice, such as time spent on homework, and an outcome, such as scores on standardized tests.

2. Desiring an outcome (to increase scores on standardized tests), we affect the practice (increase the amount of time spent on homework).
  3. We cannot be sure that the practice causes the outcome; nor do we care, as long as the relationship between them is predictable.
- C. Sign arguments are used to rely on the judgment of expert authorities.
    1. The assumption is that expertise is a sign of accuracy with regard to the particular matters about which the expert testifies.
    2. We must be sure that the expert is speaking in his or her field of expertise, has a basis for making the statement, and is not reflecting obvious bias or vested interest.
- III. To test inferences from sign, we can ask a series of questions.
    - A. Do the sign and the thing signified generally occur together?
    - B. Are there countersigns?
    - C. Does the sign appear often without the thing signified?
    - D. Can a sign actually signify two or more different, even opposite, things?
    - E. Is there a basis for thinking that the relationship is anything other than mere coincidence?
    - F. Has a sign relationship mistakenly been regarded as a causal relationship?

#### Essential Reading:

Chaim Perelman, *The Realm of Rhetoric*, pp. 89–101.

Richard D. Rieke and Malcolm O. Sillars, *Argumentation and the Decision Making Process*, pp. 114–115, 117–118.

#### Supplementary Reading:

David Zarefsky, *Public Speaking: Strategies for Success*, pp. 164–166.

#### Questions to Consider:

1. Should sign inferences be used only when causal inferences are unavailable, or are there any conceivable reasons to prefer sign inferences over causal inferences?
2. When using sign inferences to rely on the judgment of authorities, how do we establish the person's expertise in order to be able to use it as a sign of correct judgment?



## Glossary

**A fortiori:** argument suggesting that what is true of the lesser is true of the greater, and vice versa.

**Ad hominem:** argument against the person; usually regarded as a fallacy if it replaces substantive argument with personal attack but sometimes an appropriate criticism of another person's character, bias, or inconsistency.

**Ambiguity:** a condition in which a word or phrase could be used with multiple meanings and it is not clear from the context of the argument which meaning is intended.

**Amplitude:** the number and range of arguments assembled to support a claim; the greater the number and diversity of arguments, the greater the amplitude.

**Analogy:** an inference based on resemblances: that things which are like in most respects are probably alike in the respect in question.

**Antecedent:** the "if" clause in an "if-then" conditional statement.

**Bandwagon effect:** accepting or rejecting a claim not on the basis of its merits but simply on the basis that many others are doing so.

**Begging the question:** assuming in an argument something that actually requires proof.

**Burden of proof:** the ultimate responsibility to demonstrate that a claim or resolution is probably true.

**Burden of rejoinder:** the responsibility to continue the argument after a plausible case has been made for or against the resolution.

**Case:** the structure of arguments and evidence developed to support or to oppose the resolution.

**Categorical:** a form of the syllogism in which statements relate categories to other categories; the relation is either inclusion or exclusion.

**Cause:** an inference that one factor somehow exerts influence on another; the inference not only asserts a predictable relationship between the factors but accounts for it.

**Circular reasoning:** repeating in the claim what is already stated in the evidence, with the result that there is no inference or progression in the argument.

**Claim:** the statement of fact, definition, value, or policy that an arguer asks the audience to accept.

**Classification:** reasoning by example in which the move is from a general statement to a specific claim.

**Coalescent argumentation:** argumentation in which the goal is to maximize the interests of both parties rather than to produce a winner and a loser.

**Composition, fallacy of:** the assumption that what is true of the part is necessarily true of the whole.

**Condensation symbols:** symbols, such as a national flag, that embody (or "condense") a wide range of emotions or connotations; people will share a positive or negative reaction to the symbol although they may have very different reasons for doing so.

**Conditional:** a form of the syllogism that begins with an "if-then" statement, either affirms or denies the "if" clause, and reaches some conclusion about the "then" clause.

**Consequent:** the "then" clause in an "if-then" conditional statement.

**Convergent:** an organizational pattern in which a group of claims, taken together, supports the resolution or in which a group of items of evidence, taken together, supports the claim.

**Correlation:** a measure of the predictable relationship between two factors, of the degree to which the presence of one predicts the presence of the other, or to which change in one predicts change in the other.

**Credibility:** the believability of a source, the product of competence, trustworthiness, good will, and dynamism as these are assessed by an audience.

**Critical discussion:** an interpersonal argument in which both parties want to resolve rather than merely settle the dispute, each has an equal opportunity to influence the other, both want to resolve the dispute on the merits rather than by reference to extraneous factors, and there are no artificial constraints on their ability to resolve the dispute.

**Deduction:** reasoning in which the claim follows necessarily and automatically from the evidence and contains no new information not present at least implicitly in the evidence.

**Dialectic:** a process of discovering and testing knowledge through questions and answers.

**Dilemma:** an argument in which one presumably is confronted with an exhaustive set of possibilities, all of which are undesirable, yet one of which must be selected.

**Disjunctive:** a form of the syllogism that begins with an "either-or" statement, affirms or denies one of the options, and makes a claim about the other.

**Dissociation:** the breaking of a previously unitary term or concept into two separate ideas, one of which is more positively valued than the other, then identifying one's own argument with the more positively valued term.

**Distribution:** a property of terms in a categorical syllogism; a term is distributed if the statement containing it refers to every member of the category that the term designates.

**Division, fallacy of:** the assumption that what is true of the whole is necessarily true of the part.

**End terms:** the terms in a categorical syllogism that appear in one premise as well as in the conclusion.

**Equivocation:** shifting the meaning or sense of a term in the course of an argument.

**Essentially contested concepts:** concepts that gain their meaning or significance only in opposition to other concepts.

**Evidence:** the statements that are offered in support of a claim.

**Example:** an inference that relates parts and wholes: that what is true of one is probably true of the other.

**Fallacy:** conventionally understood as an argument that appears to be valid but is not; sometimes used loosely to refer to any deficiency in an argument; more specifically, identifies deficiencies in form or (according to some theorists) in procedure.

**False dilemma:** a purported dilemma in which the alternatives are not exhaustive (there are other unmentioned possibilities) or in which they are not all undesirable.

**Figurative analogy:** an analogy that asserts a similarity in the relationships between things, events, places, and so on, rather than between the items themselves.

**Formal reasoning:** reasoning in which claims follow from evidence as a matter purely of form, so that content and context are irrelevant; often equated with deduction, mathematical reasoning, or symbolic logic.

**Generalization:** inference from example in which the movement is from specific evidence to a general claim.

**Hasty generalization:** a generalization made on the basis of an insufficient number of examples.

**Heap:** the argument that, because each increment of something will be of no consequence, no amount of increment can be of consequence and a "critical mass" cannot be achieved.

**Induction:** reasoning in which the claim follows from the evidence only with some degree of probability and in which the claim contains new information not present in the evidence.

**Inference:** a mental move from evidence to a claim so that one accepts the claim on the basis of the evidence.

**Informal reasoning:** reasoning that is not purely a matter of form; in which content and context cannot be ignored.

**Issue:** a question that is inherent in the resolution and vital to its success; an argument that must be established in order to establish the claim contained in the resolution.

**Literal analogy:** an analogy that is a direct comparison of objects, events, places, and so on, starting with the knowledge that they are basically alike and inferring that they are probably alike in the respect under consideration.

**Logic:** structures of reasoning, whether formal or informal; the concern is with the relationships among statements rather than the relationship between statements and audiences.

**Middle term:** the term in a categorical syllogism that appears in the premises but not in the conclusion.

**Mini-max principle:** a guideline for strategic choices in attack and defense: one should make those choices that, with minimum effort and risk, yield the maximum gain.

**Narrative:** an inference from the coherence of elements in a story or plot line.

**Non sequitur:** an argument in which the claim has no conceivable relationship to the evidence and does not follow from it.

**Objective data:** evidence that can be independently established or verified and that is widely agreed to.

**Parallel:** an organizational structure in which each claim independently establishes the resolution or each piece of evidence independently establishes the claim.

**Personal sphere:** the sphere of argument in which disputes concern only the participants and are resolved by them; typically, argumentation is private and ephemeral.

**Persuasive definition:** a definition that changes the denotation of a term while retaining the positive or negative connotation.

**Phoros:** the pair of terms in a figurative analogy that is better known; the relationship between them will be used to infer a similar relationship between the other two terms.

**Post hoc fallacy:** the assumption that, because one event followed another, the first somehow caused the second.

**Presence:** salience, importance, conscious awareness.

**Presumption:** a descriptive characteristic of the position that would prevail in the absence of argumentation; the arguer who does not hold presumption must present a case sufficiently compelling to outweigh it.

**Prima facie:** literally, "at first face"; a case that, on the surface, seems to satisfy the burden of proof unless something is said against it.

**Proof:** support for a claim; reasons to justify acceptance of a claim; not to be confused with scientific demonstration or mathematical certainty.

**Public sphere:** the sphere of argument that is of general interest to people in their capacity as citizens and in which everyone is eligible to participate.

**Red herring:** irrelevant material that may be introduced into an argument to distract or to deflect attention.

**Reductio ad absurdum:** method of refutation that suggests the other arguer's position leads to unacceptable implications.

**Refutation:** the process of criticizing, attacking, or responding to an argument; sometimes the term is also used to embrace the process of defending, rebuilding, or extending an argument after it has been attacked or criticized.

**Resolution:** the ultimate claim that an advocate seeks to prove or disprove; the substance of a controversy; a declarative statement that responds to the central question in a controversy.

**Rhetoric:** study of the ways messages influence people; the faculty of discovering the available means of persuasion in a given case.

**Self-sealing:** an argument that cannot be tested or falsified because its warrant accounts for all possibilities, even those that seemingly would disconfirm the claim.

**Series:** an organizational structure in which each claim or piece of evidence leads to the next, only at the end of the chain leading to the resolution or claim in question.

**Sign:** an inference from the predictable relationship between factors: the presence of one predicts the presence of the other, or change in one predicts change in the other.

**Slippery slope:** an argument that suggests that a seemingly trivial or inconsequential action will start an irreversible chain of events leading to catastrophe.

**Social knowledge:** the conventional wisdom or common judgment of a society that is acted on as if it were true.

**Sphere:** a metaphorical arena for argumentation in which a distinctive set of accumulated expectations defines the context and the range of persons eligible to participate.

**Stasis:** the focal point of a controversy; the question on which the controversy turns, the "point of rest" at which the force of an assertion is countered by the force of a denial.

**Straw man:** an answer to an argument that has not been advanced and that is not germane to the matter under discussion.

**Syllogism:** a standard structure of reasoning containing two premises and a conclusion; the premises are the evidence and the conclusion is the claim; the conclusion is derived from the premises.

**Technical sphere:** the sphere of argument in which controversy takes place in specialized fields, is governed by the conventions of the field, and is accessible to people in the field.

**Theme:** the pair of terms in a figurative analogy about which the conclusion will be drawn; the relationship between the terms in the other, more well-known, pair will be used to infer a relationship between the terms in this pair.

**Topoi:** literally, "places"; categories of issues that typically arise on resolutions of a given type.

**Vagueness:** the property of a term that is of indeterminate meaning or that has multiple meanings but the meaning intended in the argument at hand cannot be determined.

**Validity:** in formal reasoning, a condition in which, if the evidence is true, the claim must be true (to have true evidence and a false claim would be contradictory); in informal reasoning, a content-neutral test of the soundness or compellingness of a claim.

**Warrant:** an authorization or license to make the inference from evidence to claim.

## Biographical Notes

**Aristotle** (384–322 B.C.E.). Wrote a systematic treatise on the art of rhetoric, which he defined as the faculty of discovering the available means of persuasion in a given case. Identified forms of argument and genres of appeal.

**Descartes, René** (1596–1650). Philosopher who used systematic doubt to find the basis of knowledge in self-evident statements. Cartesian logic regards only formal deduction as acceptable reasoning.

**Eemeren, Frans H van.** (1946–) Professor of argumentation studies at the University of Amsterdam. One of the founders and principal proponents of the pragma-dialectical approach to argument analysis.

**Farrell, Thomas B.** (1947–). Professor of Communication Studies, Northwestern University. Rhetorical critic and theorist of the public sphere; contemporary interpreter of Aristotle. Introduced the concept of *social knowledge* to designate a community's storehouse of conventional wisdom that is accepted as true.

**Goodnight, G. Thomas** (1948–). Professor of Communication Studies, Northwestern University. Postulated controversy as the basic defining unit of argumentation; described the liberal and the conservative presumptions in argument; distinguished among the personal, technical, and public spheres of argument.

**Gorgias** (c. 483–c. 376 B.C.E.). Sophist who developed and taught figures of speech and stylistic variation, although not in a systematic fashion.

**Grice, H. P.** (1915–1988). A philosopher of language who analyzed ordinary conversations and developed normative principles for language use that are implicitly understood by the participants in a successful interchange.

**Grootendorst, Rob** (1943–2000). Professor of argumentation studies at the University of Amsterdam; one of the co-developers of the pragma-dialectical approach to argumentation studies.

**Habermas, Jürgen** (1929–). German social theorist who has described the transformation of the public sphere from its eighteenth-century ideal to an increasingly bureaucratized and technical forum.

**Hamblin, Charles L.** (1922–1985). Australian philosopher who challenged conventional views of fallacies by suggesting that they should be seen as units of discourse that were not fallacious in all circumstances.

**Isocrates** (436–338 B.C.E.). A Sophist who taught by modeling examples of outstanding practice rather than by form precept; a leading antagonist of Plato.

**Lippmann, Walter** (1889–1974). Journalist, theorist, and critic of politics and society. Argued in the 1920s that the public was not competent to make

judgments about policy; qualified this view during the 1950s by arguing that it was possible to cultivate a “public philosophy.”

**Mill, John Stuart** (1806–1873). English utilitarian philosopher; developed systems for inferring causation that are the basis for most social science research.

**O’Keefe, Daniel J.** (1950–) Professor of Speech Communication, University of Illinois. Called attention to two separate perspectives on argumentation, as both product (text) and process (interaction), with different methods and objectives of study for each.

**Peirce, Charles Sanders** (1839–1914). American pragmatist philosopher who maintained that there were four principal ways of knowing: tenacity, authority, correspondence with *a priori* beliefs, and verification (the scientific method).

**Perelman, Chaim** (1922–1984). Belgian philosopher of jurisprudence; together with Mme. L. Olbrechts-Tyteca, developed a system of rhetoric in which argument is the fundamental unit; introduced such concepts as presence, dissociation, and the universal audience.

**Plato** (c. 428–347 B.C.E.). Philosopher who attacked the Sophists and assumed that their excesses were inherent in their practice; distinguished rhetoric (concerned with appearances) from philosophy (concerned with truth).

**Protagoras** (c. 445 B.C.E.). Sophist who is often regarded as the “father of debate” because he taught that every question has two sides and that “man is the measure of all things.”

**Ramus, Peter** (1515–1572). Dutch philosopher who refigured the relationship between philosophy and rhetoric by regarding invention and arrangement as part of philosophy and logic, leaving rhetoric with only style and delivery.

**Stevenson, Charles L.** (1908–). Philosopher of language who introduced the concept of the persuasive definition, which transfers positive or negative connotation from one denotation to another.

**Toulmin, Stephen** (1922–). British philosopher who has held several academic appointments in the United States; theorized that formal logic is an inappropriate prototype for argumentation and developed a model of argument as an alternative to the syllogism.

**Walton, Douglas N.** (1942–). Professor of Philosophy at the University of Winnipeg. Engaged in a systematic study of the fallacies in an attempt to determine more precisely the conditions under which they may be valid arguments.

**Whately, Richard** (1787–1863). Archbishop of Dublin; developed a theory of presumption that he maintained applied to every existing institution on the grounds that change is not a good in itself.

**Willard, Charles Arthur (1945– ).** Leading proponent of the view that argumentation should be seen primarily as a type of interaction in which persons maintain what they construe to be incompatible positions; has written extensively on argument fields and the need for interfield borrowing of discourse.

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- . *Norms of Rhetorical Culture*. New Haven: Yale University Press, 1993. Develops a theory of society and culture grounded in respect for the practice of argumentation and rhetoric.
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- Freeley, Austin J., and David L. Steinberg. *Argumentation and Debate: Critical Thinking for Reasoned Decision Making*, 10<sup>th</sup> ed. Belmont, Calif.: Wadsworth, 2000. The leading textbook in argumentation and debate.
- Gilbert, Michael A. *Coalescent Argumentation*. Mahwah, N.J.: Lawrence Erlbaum, 1997. Develops a theory of argumentation in interpersonal encounters as multi-modal and fundamentally cooperative.
- Habermas, Jürgen. *Structural Transformation of the Public Sphere*, translated by Thomas Burger. Cambridge, Mass.: MIT Press, 1989 (1962). Develops a theory of the weakening of the public sphere during the twentieth century.
- Hauser, Gerard A. *Vernacular Voices: The Rhetoric of Publics and Public Spheres*. Columbia, S.C.: University of South Carolina Press, 1999. Argues that multiple publics can be discerned by attending to the arguments and rhetorical style of ordinary citizens.

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Kuhn, Thomas S. *The Structure of Scientific Revolutions*, 2<sup>nd</sup> ed. Chicago: University of Chicago Press, 1970. Distinguishes between normal and revolutionary science and maintains that discourse in the latter takes place outside the conventions of seemingly deductive normal science.

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Nadeau, Ray. "Hermogenes' *On Stases*: A Translation with an Introduction and Notes," *Communication Monographs* 31 (November 1964), 361–424. Makes available in English the leading classical writing on the subject of *stasis*.

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