CHAPTER 6

Types of Proof

After studying this chapter, you will be able to:

- LO1 Describe and analyze the three categories of traditional proof.
- LO2 Explain the characteristics of a logical proof (*logos*) and use them in an argument.
- LO3 Explain the characteristics of a proof of credibility (*ethos*) and use them in an argument.
- LO4 Explain the characteristics of an emotional proof (*pathos*) and use them in an argument.
- LO5 Explain how language and style convey logic (*logos*), credibility (*ethos*), and emotion (*pathos*) in an argument.
- LO6 Define the value of using these three types of proof for assessing written, visual, and online argument.

The claim, the support, and the warrants are the three parts that are present in any argument. This chapter will help you understand the support and warrants that provide proofs for a claim. You will be introduced first to the different types of proof, then to the language and style associated with each of them.

As you begin to work with the proofs, you will discover that they are not uniform patterns that are obvious and easy to recognize. Indeed, slippery and imperfect as they are, they simply represent an attempt to describe what goes on in the real world of argument and in the minds of writers and readers of argument. Understanding them can put you closer to an author, permitting you to better understand how that individual thought about, interpreted, and developed a particular subject. When you switch roles and become the author yourself, your knowledge of what can happen in argument helps you develop your own thoughts and effective arguments.

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The Traditional Categories of Proof

The traditional categories of proof, like much of our most fundamental argument theory, were first articulated by classical theorists, and they are still useful for describing what goes on in real-world argument today. In the *Rhetoric*, Aristotle said that an arguer must state a claim (or a proposition) and prove it. He also went into detail about the broad categories of proof that can be employed to establish the probability of a claim. Aristotle's categories of proof remain useful because they accurately describe what classical arguers did then and what modern arguers still do today.

Aristotle distinguishes between proofs that can be produced and laid on the table, so to speak—like a murder weapon, fingerprints, or a written contract—and proofs that are invented, and represent the creative thinking and insights of clever and intelligent people.

Aristotle divides this second category of proof into three subcategories: proofs that appeal to logic and reason, proofs that establish the credibility of the source, and proofs that appeal to the emotions. The Greek words used to refer to the proofs are *logos* (logic), *ethos* (credibility), and *pathos* (emotion).

Logical proof appeals to the audience's reason, understanding, and common sense. It is consistent with what people know and believe, and it gives fresh insight and ideas about issues. As proof, it relies mainly on such support as reasoned opinion and factual data as well as on warrants that suggest the soundness and truth of such support. Aristotle declared that logical proof is the most important kind of proof in argument, and most modern theorists agree with him. Richard M. Weaver, a well-known modern rhetorician, for example, says that argument has its primary basis in reasoning and that it appeals primarily to the rational part of humans. Logical proof, he says, provides the "plot" of argument.[1] The other two types of proof are also present and important, however.

Proof that establishes ethos appeals to the audience's impressions, opinions, and judgments about the individual stating the argument. An arguer who demonstrates competence, good character, fair-mindedness, and goodwill toward the audience is more convincing than the arguer who lacks these qualities. Those who project such favorable qualities to an audience have established good *ethos*. Audiences are more likely to trust and believe individuals with good *ethos* than those without it. At times, arguers also need to establish the *ethos* of the experts whom they quote in their arguments. They usually accomplish this purpose by providing information about these authorities so that audiences will appreciate their mastery or expertise and consequently be more willing to accept what they say.

Emotional proof is used to appeal to and arouse the feelings of the audience. The audience's feelings are aroused primarily through emotional language, examples, personal narratives, and vivid descriptions of events that contain

[1]Richard M. Weaver, "Language Is Sermonic," in Richard L. Johannesen, ed., *Contemporary Theories of Rhetoric: Selected Readings* (New York: Harper & Row, 1971), 163–79.

emotional elements and that provoke strong feelings in other people. Emotional proof is appropriate in an argument when it is used to develop the claim and when it contributes to the sense of logical conviction and agreement that are argument's intended outcomes. A well-reasoned set of logical proofs contributes to such outcomes. Emotion contributes as well to the strength of the acceptance of a logical conclusion. Imagine, for example, an argument in favor of increasing taxes to build housing for homeless people. The logical argument would describe reasons for these taxes, methods for levying them, and recommendations for spending them. The argument would be strengthened, however, by one or more vivid and emotional examples of homeless people who lead miserable lives.

Visual argument also relies on these same proofs to strengthen its claims; however, visuals are often more powerful than words because they communicate so quickly. Look at the Dow Chemical Company advertisement in Figure 6.1. This ad relies on all three types of proof to make the audience believe the claim that this company is more interested in people all over the world than it is in mere chemistry and chemicals. Examine the ad, read the next paragraph, and answer the questions in the margin next to the ad for yourself.

The producers and authors of the ad expect you to link three elements: the *logical* chemical symbol in the ad; the *emotionally appealing* young Tibetan boy whom they describe as having "one of the best minds on the planet" and the

Figure 6.1

Analyze the proofs used in this Dow Chemical Company advertisement. First, look at the ad itself and then, since the words in the ad are too small to read here, read instead the explanation and analysis of this ad in the accompanying paragraphs on this page and the next. Now comment on the use of *logos, ethos, and pathos* in this ad. How do they work together to make the claim? How convincing is this ad? Why do you think so?

value statements that help create the company's *ethos*—"When you look at the world through the eyes of the Human Element, anything is possible" and "Our bond with the Human Element. It is the chemistry of life on Earth. And that's what the Dow Chemical Company is all about." Now think about the *warrant.* When you have considered all of the proof, you might state the warrant this way: Of course this boy can learn chemistry and become a successful chemist, if he is given the opportunity and the support. The ad also suggests that because the company values people, Dow Chemical will encourage and possibly provide that support. The *backing* for the warrant assumes that many viewers first looking at the picture of this boy would think that because of his dress and where he lives, he is unlikely to receive a good science education and become a scientist. The proofs and the warrant challenge that initial assumption. The producers and authors of the ad expect the audience to conclude that the company has humanitarian goals and is supportive of disadvantaged people in the world.

The next three sections will introduce you to seven types of logical proof, one type of proof that builds *ethos,* and two types of emotional proof. All are commonly used in argument. The number and variety of logical proofs is greater because logical thinking dominates and provides the "plot" for most argument. However, most arguments rely on a variety of proofs because offering several types of proof usually makes a stronger argument than relying on only one.

Each type of proof will be explained according to the following format so that you can understand each kind as quickly and easily as possible.[2]

Examples: Examples follow a brief general description of each proof.

Claim and support: Describes what to look for, that is, what types of support you can expect to find, and how to find the claim.

Warrant: Identifies what you are expected to assume to make logical connections between the support and the claim. The warrants associated with types of proof suggest specific ways of thinking about support and its function in an argument.

Tests of validity: *Validity* in argument is measured by using your knowledge of the structure of argument and its components and by what you might term a "questioning receptivity" to argumentation. This is another way of describing the critical reading method that requires that you probe whether or not a proof (analogy, statistic, etc.) or argument itself is sound, genuine, effective, authoritative, and believable. You are provided with questions to ask to help you test the reliability and validity of the proof. These questions focus your attention on the support and on the warrant, and on how they do or do not function together as effective proof. The questions can also help you locate the weaknesses in an argument, which will help you plan rebuttal and formulate argument of your own.

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[2]In this chapter I have drawn on some of Wayne Brockriede and Douglas Ehninger's ideas in "Toulmin on Argument: An Interpretation and Application," *Quarterly Journal of Speech* 46 (1969): 44–53. I have expanded and adapted these authors' analysis of proofs to make it apply to the reading and writing of argument as explained in this book.

Types of Logical Proof: *Logos*

LO2 Explain the characteristics of a logical proof (*logos*) and use them in an argument.

Logical proofs (also called substantive proofs) include facts, reasons, and opinions that are based on reality. Such proofs rely on factual information, statistics, and accounts of actual events, past and present. The support used in logical proof is real and drawn from experience. Logical (or substantive) warrants guarantee the reliability and relevance of this support. Logical proofs represent common ways of thinking about and perceiving relationships among the events and data of the real world and offer those ideas and relationships as support for a line of argument.

A MNEMONIC DEVICE

It is helpful to be able to recall easily the full range of logical proofs either when you are reading argument or when you are developing an argument so that you can use them to your advantage. Figure 6.2 provides a mnemonic device that will help you remember them. It shows the first letter of each proof arranged to make a nonsense word, SICDADS, and a picture to help you remember it. You can run through this mnemonic mentally when you are thinking about ways to develop the ideas in a paper or other format for your argument.

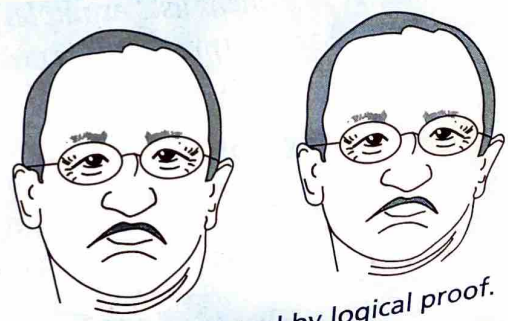
Let us now consider the seven logical proofs in the order provided by the mnemonic SICDADS.

ARGUMENT FROM SIGN

A *specific visible sign* is sometimes used to prove a claim. A sign can be used to prove with certainty: someone breaks out in chickenpox, and the claim, based on that certain sign, is that the person has chickenpox. A sign also can be used to prove the probability of a claim: a race riot, someone argues, is probably a sign of the claim that people think they are treated unfairly. On the other hand, the sign may turn out to be a pseudoproof, the "proof" of a false claim: a child asks, "Why should I believe in Santa Claus?" and the parent answers, "Look at all the toys under the tree that weren't there yesterday." That support is used as a sign for the claim that Santa Claus exists.

Figure 6.2 *The Seven Logical Proofs: Their Initials Spell Ou SICDADS*

Sign
Induction
Cause
Deduction
Analogies (historical, literal, figurative)
Definition
Statistics



"SICDADS" refuted by logical proof.

Example of Sign

Here is a hypothetical example of an argument from sign used in an essay. Would you say that the claim based on this sign is a certain or a probable claim?

Claim:	The cheers emanating from the thousands of protesters marching in the street is a sign of public unrest.
Support (sign):	There are cheers emanating from the protesters marching in the street.
Warrant:	This march indicates that there is public unrest.

Claim and Support

Look for visible clues, symptoms, and occurrences that are explained as obvious and clear signs of a certain belief or state of affairs. Look for the conclusion or claim that is made on the basis of these signs.

Sign Warrants

You are expected to assume that the sign is actually a sign of what the author claims it to be.

Tests of Validity

Is this really a sign of what the author claims it to be? Is there another explanation for the sign?

ARGUMENT FROM INDUCTION

Inductive argument provides a number of examples and draws a claim, in the form of a conclusion, from them. The audience is expected to accept the group of examples as adequate and accurate enough to make the inductive leap to the claim. Inductive argument is also called argument from generalization or argument from example because the claim is a generalization made on the basis of the examples. To help you remember the special features of inductive argument, learn its prefix *in-*, which means "in" or "into," and the root *duc,* which means "lead." *An inductive argument uses examples to lead into a claim or generalization about the examples.*

Examples of Induction

Here is an example of induction. Four different people take their cars to the same car repair shop and are overcharged. The claim is then made that anyone who takes a car to that repair shop will probably be overcharged.

Inductive reasoning is the basis of the scientific method. Most scientific conclusions are reached inductively. When a sufficient number of phenomena are observed repeatedly, a generalization is made to explain them. Here is an example.

Claim (generalization): The sun always comes up.
Support: For example, the sun has come up every day of recorded history.
Warrant: Every day provides a sufficient number of days to make the claim that the sun always comes up.

Consider this third and final example of argument from induction. In the Declaration of Independence (pages 220–222), Thomas Jefferson listed several examples of "repeated injuries" that the king of England was guilty of in dealing with the United States. From these examples, Jefferson drew the conclusion that the United States was justified in declaring the United States free and independent of Great Britain. The warrant is that the repeated injuries gave sufficient reason for the United States to take action and declare independence.

Induction demonstrates probability rather than truth whenever there is the possibility of an example that would prove an exception. For instance, the claim is made that occasional smoking will lead to addiction. But a person is discovered who smokes off and on and never develops cigarette addiction. Yet, an apple always falls from a tree, thereby demonstrating gravity, and the sun always comes up, demonstrating that law of nature. No one has been able to find exceptions to disprove these last two generalizations.

To be effective, inductive argument requires a sufficient number of examples. When a generalization is made on the basis of only one or a few examples, it is called a *hasty generalization*. To claim, for instance, that an office worker should always be able to enter a certain amount of data because he did it once may not be accurate. To make a broad generalization, such as *all* office workers ought to be able to enter a certain amount of data because *one* employee was able to, is called a *sweeping generalization*. An inadequate sample of cases weakens or invalidates an inductive argument.

Claim and Support

Look for a group of examples followed by a generalization (claim) based on the examples, or the generalization (claim) may be stated first and then be followed by several examples.

Inductive Warrants

You are expected to assume that the list of examples is representative and that it shows a definite trend. You are also expected to assume that if you added more examples of the same general type, the conclusion would not change.

Tests of Validity

Is the sample adequate? Would more examples continue to show the trend? Are there examples that show an opposite trend or that provide an exception? (Is a person who smokes occasionally without developing an addiction a single exception?) Can we make the inductive leap from the examples to the generalization to demonstrate that it is probably true?

ARGUMENT FROM CAUSE

Argument from cause places the subject in a *cause-and-effect relationship* to show that it is either the cause of an effect or the effect of a cause. It is very common in argument to explain or to justify a claim with cause-and-effect reasoning.

Historians frequently use argument from cause. When they ask why a certain historical event occurred, they are seeking the cause. Visual and multimedia arguments also can make claims of cause. In advertisements, buying a certain product is often shown to cause beneficial results.

Example of Cause

Claim: The climate is changing worldwide (effect).
Support: Many scientists claim air pollution is the cause.
Warrant: We should believe the scientists.

Claim and Support

Look for examples, events, trends, or people who have caused certain things to happen. Look for the effects. For example, "Video games cause children to become violent." Or, turn it around and look for the effects first and then the causes: "Many children are violent as a result of playing too many violent video games." Look also for clue words such as *cause, effect, resulted in, as a result, as a consequence,* and *because* to indicate that cause-and-effect reasoning is being used.

Causal Warrants

You are expected to assume that the causes really do create the identified effects or that the effects really are the results of the named causes.

Tests of Validity

Are these causes alone sufficient to create these effects? Could these effects result from other causes? Can I think of exceptions to the cause-and-effect outcome?

ARGUMENT FROM DEDUCTION

Deductive argument is also called argument from principle because its warrant is a general principle. Remember that the warrant may or may not be stated explicitly in an argument. Etymology can help you remember the special features of deductive argument. The prefix *de-* means "from" and the root *duc* means "lead." *A deductive argument leads from a general principle,* which is the warrant, applies it to an example or specific case, which is described in the support, and draws a *conclusion,* which is the claim.

Examples of Deduction

Argument deals with matters that are probably rather than certainly true. People do not argue about matters that are certainly true because they already agree about them. Here is an example of a deductive argument based on a general principle that people would agree with and accept as true. Thus, they would not argue about it.

General warrant:	Every person has a unique DNA sequence.
Support (specific case):	The accused is a person.
Claim:	The accused has a unique DNA sequence.

This example might be used as a minor argument to support a claim that someone is guilty of a crime. It would never be the main issue in an argument, however, because it is not arguable.

Most of the deduction you will encounter in argument is arguable because it deals with probabilities rather than with certainties. Here is an example of deductive reasoning. Fictional sleuth Sherlock Holmes used deduction to reach his sometimes astonishing conclusions. Holmes examined the supporting evidences—footprints in this example—and deduced that the man who left them walked with a limp. The general principle, that most uneven footprints are left by people who limp, is an assumption that is important in Holmes's deductive thinking even though it is not stated in the argument. It does not need to be spelled out for readers who are able to supply that warrant themselves as they accept Holmes's conclusion. The Holmes deduction can be summarized as follows: the purpose of this argument is to establish the type of person who left these footprints.

Unstated warrant:	Most uneven footprints are left by people who limp.
Support (specific case):	These footprints are uneven.
Claim:	The person who left these footprints walks with a limp.

Is there any part of that argument that you might challenge as only possibly or probably rather than as certainly true? If so, you can argue about it.

Claim and Support

Identify the claim by answering this question: "On the basis of a general principle (warrant), implied or stated, what does the author expect me to conclude about this specific example or case?"

Deductive Warrants

You are expected to assume that a general principle about a whole category of phenomena (people, places, events, and so forth) has been stated or implied in the argument and that it is accurate and acceptable. You are expected to decide that since the general principle, or warrant, and the support for the specific case are both accurate and acceptable, the conclusion is also acceptable and probably true.

Tests of Validity

Is the warrant sound and believable? Does the warrant apply to the example or case? Is the support for the case accurate? How reliable, then, is the conclusion?

If the reader has a problem with either the warrant or the example in a deductive argument, the conclusion will not be acceptable. Consider Holmes's warrant that uneven footprints are left by people who limp. That may be convincing to some readers but not others. For instance, a reader might reflect that a person

who is pretending to limp or is carrying a heavy suitcase could also leave uneven footprints. This reader would then question the warrant and decide that the proof is not even probably true.

Here is another example of a deductive argument that would not be equally successful with all audiences.

Unstated warrant:	Families cannot be happy when the mother works outside the home.
Support (specific case):	The mother in this family works outside the home.
Claim:	This is an unhappy family.

For readers who come from happy homes with working mothers, the warrant in this example would seem faulty.

In the next example of a deductive argument, the support could be a problem for some readers who might have trouble accepting it because they think children's stories are not literary and do not have deep symbolic levels of meaning. Another reader might disagree and argue for the opposite point of view, providing examples of children's stories that have such literary qualities and thus refute the other readers' claim. Whether or not a reader accepts the conclusion depends entirely on whether the reader also accepts the warrant and support.

Warrant:	All literary stories have deep symbolic levels of meaning.
Support (specific case):	This children's story has deep symbolic levels of meaning.
Claim:	Children's stories are literary stories.

All parts of a deductive argument need to be well grounded, accurate, and acceptable to an audience for it to be convincing.

Induction and Deduction Sometimes Work Together

A number of examples are cited and a generalization is made based on those examples—this is the inductive part of the argument. The generalization can then be utilized as the starting point for a deductive argument, one in which it serves as the warrant, that part of the argument that the audience needs to accept. This generalization is combined with a specific case, and a claim is made that is based on applying the generalization to the specific case. Here is a hypothetical example that shows how this can be structured. Imagine an essay in which a student, based on interviews with his fellow classmates, makes the argument that standardized tests should no longer be used to evaluate his academic performance.

Induction: Recall that the warrants are implied by the arguer and assumed by the audience.

Examples:	Suppose the author's interviews revealed that seven students in this classroom believe that standardized tests should no longer be used to evaluate academic performance.
Claim (generalization):	Standardized testing should not be used to evaluate student performance in college classrooms.

Warrants:	The opinions of those seven students is a sufficient number for the instructor to change the curriculum. Student opinion can change an instructor's teaching policy.

Deduction: Now the claim of the inductive argument becomes the warrant or general principle that is the starting place for the deductive argument.

General warrant:	Evaluation of student performance should be based on academic work other than standardized test scores.
Specific case:	The author objects to standardized testing.
Claim:	Therefore, the author's academic evaluation should be based on criteria other than standardized testing.

Tests of Validity

Examine the two inductive warrants: Are those seven students enough to create a change in an instructor's evaluation policy? Can student opinion change an instructor's policy in a class? If you answer no to both those questions, then you will not accept the general warrant in the deductive argument either because it is based on the unacceptable warrants in the inductive argument: Students don't set policy for evaluating student performance, and even if they did, seven students would not be a large enough number to make this change. Both the inductive and the deductive arguments can be shown to be invalid because they are based on faulty warrants.

ARGUMENT FROM HISTORICAL, LITERAL, OR FIGURATIVE ANALOGY

Historical and literal analogies explore similarities and differences between items in the same general category, and *figurative analogies* do the same, only with items in very different categories. In drawing analogies, we show how something we may not know much about is like something we know in greater detail. *In other words, we interpret what we do not know in light of what we do know.* We then supply the warrant that what happened in one case will happen in the other, we draw conclusions, and we make a claim based on the comparisons in the analogy.

Historical Analogies

These explain what is going on *now* in terms of what went on in similar cases *in the past.* Future outcomes are also often projected from past cases. The idea is that what happened in the past will probably repeat itself in the present. Also, the two events are so similar that the result of the former will surely be the result of the latter.

Example of a Historical Analogy

The following example compares a present event with a past event.

Claim:	People will lose faith in the war in Afghanistan.
Support:	People lost faith in the Vietnam War.
Warrant:	The two wars are similar.

Literal Analogies

These compare two items in the same category: two school systems, two governments, two religions, two individuals. Outcomes are described as in historical analogies—that is, what happened in one case will happen in the other because of the similarities or the differences.

Example of a Literal Analogy

Two similar items (spending policies) are compared in this example.

Claim: The state should spend more money on education.
Support: Another state spent more money with good results.
Warrant: The two states are similar, and the results of one will be the results of the other.

Figurative Analogies

These compare items from two different categories, as in metaphor, but the points of comparison in a figurative analogy are usually spelled out in more detail than they are in a metaphor. Many figurative analogies appeal to emotion rather than to reason. Figurative analogies are effective as logical proof only when they are used to identify *real qualities* that are shared by both items and that can then be applied to help prove the claim logically. When the items in a figurative analogy are compared either to add ornament or to stir up an emotional response, the analogy functions as emotional proof. It engages the emotions rather than reason.

Examples of Figurative Analogies

Here are some examples of figurative analogies used as logical proof. To prove that reading a difficult book should take time, Francis Bacon compares that activity with taking the time to chew and digest a large meal. The qualities of the two activities, rather than the activities themselves, are compared. Since these qualities are not spelled out, the audience must infer that both take time and that understanding, like digestion, benefits and becomes a permanent part of the individual. Here is this argument laid out so that you can see how it works.

Claim: Reading a difficult book should take time.
Support: Digesting a large meal takes time.
Warrant: Reading and eating are sufficiently alike that they can be compared.

In another example of a figurative analogy used as logical proof, the human fossil record is compared to an apple tree in early winter that has only a few apples on it. The quality that the fossil record and the tree have in common, which the reader must infer, is that both tree and fossil record have a complicated system of branches and limbs. Also, the few apples on the tree are like the few available fossils. At one time there were many of both. The qualities compared in these two instances improve a rational understanding of the fossil record.

Here is a third example of a figurative analogy. This analogy comes from an ad sponsored by the Sierra Club, a group that works to protect the environment. Two pictures are placed side by side. The first is of the Statue of Liberty, which is 305 feet high, and the second is of a giant sequoia tree, which is 275 feet high. A question is posed: "Would you destroy the Statue of Liberty for scrap metal?" We are expected to reason by analogy and compare destroying the Statue of Liberty for scrap metal with destroying the tree for lumber or sawdust. The individual who created this ad hopes this analogy will encourage people to want to protect the trees as much as they want to protect the Statue of Liberty. Would you say that this figurative analogy appeals mainly to emotion or to reason?

Claim and Support

Look for examples of items, events, people, and periods of time that are being compared. Whether these items are drawn from the past or the present, as in the case of historical or literal analogies, they must be drawn from the same category: two types of disease, two types of school systems, two types of government, and so on. Look for the clue words *compare, contrast, like, similar to,* and *different from* to signal that comparisons are being made.

In the case of figurative analogies, look for two items being compared that are from totally different categories. Identify the qualities that they have in common. Look for the clue words *like, as, parallel, similar to,* or *compare.* Discover claims that are made as a result of comparing similarities or differences.

Comparison Warrants

You are expected to assume that the items being compared are similar as described and that what happens in one case will probably occur in the other. For figurative analogies, you are expected to assume that the qualities of the two items are similar and significant enough so that reference to one will help explain the other and will serve as convincing proof.

Tests of Validity

Are the two items similar as claimed? Can I think of ways they are not similar or of other qualities they share that would change the claim? Are the outcomes likely to be the same in both cases? Why or why not?

For figurative analogies: Are the qualities of these two items similar, significant, and real enough to help prove a logical argument? Or are they so dissimilar, so far-fetched, or so trivial that the comparison does not prove anything? Does the analogy serve as an ornament, an emotional appeal, or a logical proof?

ARGUMENT FROM DEFINITION

Definition is extremely important in argument. It is difficult to argue about any subject unless there is general agreement about the meanings of the *key terms,* especially when they are part of the claim. Sometimes an entire argument is based

on the audience's acceptance of a certain meaning of a key term, which is often in the form of an if–then statement. If the audience accepts the definition, the arguer says, then the claim should be accepted "by definition."

Examples of Definition

An argument against gay marriage can be laid out as deduction, in the manner shown in the example below. Notice that *if* marriage is defined as a union between a man and a woman, *then* by definition two men or two women cannot marry.

Warrant:	Marriage is defined as the union of a man and a woman.
Support (specific case):	Two people of the same sex are not a man and a woman.
Claim:	Two people of the same sex cannot marry.

For the audience to accept gay marriage, they would have to change their definition of marriage to include a marriage between two men or two women. If that were done, there would no longer be an argument on this subject.

Claim and Support

Look for all definitions or explanations of words or concepts. These may be a sentence, several paragraphs, or an entire essay in length. Notice if the definition is used simply to define a word or if it is used as part of the proof in the argument. Look for a claim that you are expected to accept as a result of the definition.

Definition Warrants

You are expected to assume that the definition describes the fundamental properties and qualities of the term accurately so that it can be used to prove the claim.

Tests of Validity

Is this an accurate and complete definition? Is it convincing in this context? Are there exceptions or other definitions for this term that would make the final claim less reliable?

ARGUMENT FROM STATISTICS

Like other forms of logical proof, statistics describe relationships among data, people, occurrences, and events in the real world, only they do so in quantitative terms.

Modern readers have considerable faith in numbers and statistics. They seem more "true" than other types of support to many people. It is more convincing to some, for example, to make the claim that we should end draft registration because it costs $27.5 million per year than simply to claim that we should end it because we no longer need it.

Read statistical proofs carefully to determine where they come from and how reliable, accurate, and relevant they are. Always note whether the original figures have been altered or interpreted in some way. Figures are often rounded off or stated in different terms, such as percentages or plots on a graph. They are also sometimes compared to other material that is familiar to the audience to make them more interesting or memorable.[3] In addition, the use of various types of graphs or charts makes data and statistics visual and easier to grasp and remember.

Example of Statistics

Here is an example of a use of misleading statistics in an article titled "Can a 15-Year-Old Be a 'Woman without a Spouse'?"[4]

Claim: A majority of American women now live without a spouse.
Support: It is reported that 51 percent of American women live without a spouse.
Warrant: This 51 percent represents a majority.

This article critiques a previous article in a newspaper that reports, "For what experts say is probably the first time, more American women [in 2005] are living without a husband than with one." This was such a striking statistic that the original article appeared on the front page of the newspaper. The subsequent critique of the article pointed out that teenagers, ages fifteen to seventeen, were included in the report, and that 90 percent of that group (6 million) were still living with their parents. One reader pointed out that it was dishonest to include fifteen-year-old women as "women living without a spouse" in the survey because some states do not even permit people to marry at age fifteen. By removing high school age women (ages fifteen to seventeen) from this group, the figure dropped, leaving 48 percent of American women living without a spouse. By eliminating all teenagers and counting only women twenty years or older, the figure dropped to 47 percent, and neither adjusted figure could be presented as a "new majority." Sources for the statistics were the Census Bureau data and the Census Bureau's 2005 American Community Survey. Both are reliable sources. The problem with the report was the inclusion of individuals in it who did not belong, which falsely elevated the figures.

Claim and Support

Look for numbers and data, in both their original and their converted form, graphs and charts of figures, and interpretations of them, including comparisons. Look for a claim based on the data.

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[3] James Wood, *Speaking Effectively* (New York: Random House, 1988), 121–27.

[4] *New York Times*, February 11, 2007, Op-Ed, 12. Byron Calame, the author of the article, is a public editor, that is, the in-house editor who serves as the readers' representative. He receives complaints about writing or interpretations in articles, checks facts, and critiques accounts in the *New York Times* for fairness and accuracy.

Statistical Warrants

You are expected to assume that the data have been gathered and reported accurately by competent people, that they are representative and complete unless stated otherwise, and that they have been interpreted fairly and truthfully.

Tests of Validity

Where did these statistics come from? To what dates do the statistics apply? How reliable is the source? How accurate are they? How are they presented? Have they been rounded off, changed, or converted? How has the change affected their accuracy? Do they prove what they are supposed to prove? Have they been interpreted fairly, or are they exaggerated or skewed? Has enough backing been provided to prove their reliability? With what are they compared, and how does this comparison contribute to their final significance? Is any significant information left out?

Tests of Validity for Statistics Presented as Graphs

Statistics are sometimes presented in graph form. The tests of validity in this case include these: Where did the information come from? What information is included in the sample? How was it gathered? Is anything significant left out or ignored because it did not fit? Are the charts and graphs labeled accurately? Are there any exaggerations?

LO3 Explain the characteristics of a proof of credibility (*ethos*) and use them in an argument.

Proof That Builds Credibility: *Ethos*

The materials provided in argument that help the audience gain a favorable impression of the arguer, the group the arguer represents, or the authorities and experts the arguer cites help create *ethos*, or the credibility of the author. The author may build credibility by referring to experience and credentials that establish his or her own expertise or the expertise of people who are quoted.

ARGUMENT FROM AUTHORITY

We are usually inclined to accept the opinions and factual evidence of people who are authorities and experts in their fields.

Examples of Authority

In an article that claims California will have another earthquake, the author describes and provides the credentials for several professors of geology from the major universities in Southern California as well as scientists from the U.S. Geological Survey Office before quoting their opinions as support.

Claim: California will have an earthquake.
Support: Professors and scientists say so.
Warrant: These experts are reliable.

Authors themselves sometimes establish their own credentials by making references to various types of past experience that qualify them to write about their subject. They also sometimes assert the *ethos* of the group they represent, in statements like "the great Republican Party," or they establish the group's *ethos* by citing their accomplishments.

Claim and Support

Look for all references to the author's credentials, whether made by the author or by an editor. Look for references to the author's training, education, professional position, background, and experience. Notice, also, references to the audience's concerns, beliefs, and values that demonstrate the author's effort to establish common ground and to show fairness and goodwill toward the audience. Look for references to groups the author may represent, and notice how they are described. Look for direct or paraphrased quotations from experts. Differentiate between facts and statements of opinion. Look for credential statements about these experts. Look for claims that are made more valid because of this expert opinion.

Authoritative Warrants

You are expected to assume that the information provided about the author, the group, or the expert is accurate, that these authorities are honorable, fair, reliable, knowledgeable, and experienced, and that they exhibit goodwill toward the audience.

Tests of Validity

Is there enough information to establish the true character and experience of the author? Is this information complete and accurate? Is there enough information about the group to believe what the author says about it? Are the credentials of the experts good enough to make their contributions reliable? Also, are the credentials relevant to the issue? (A star athlete may not be the best judge of soft drinks or fast food.) If a source is quoted, is the source reliable? Argument based on authority is as good as the authorities themselves.

Types of Emotional Proof: *Pathos*

LO4 Explain the characteristics of an emotional proof (*pathos*) and use them in an argument.

Some argument theorists would say that there should be no appeals to emotion or attempts to arouse the emotions of the audience in argument. The idea is that an argument should appeal only to reason. Emotion, they claim, clouds reasoning and judgment and gets the argument off course. Richard M. Weaver, quoted earlier in this chapter, would disagree. Weaver points out that people are not just austerely unemotional logic machines who are interested only in deduction, induction, and cause-and-effect reasoning. People also use language to communicate feelings, values, and motives.[5]

[5]Weaver elaborates on some of the distinctions between logic and emotion in "Language Is Sermonic."

Furthermore, when we consider that the source of much argument lies in the dramatic, emotionally laden occurrences of everyday life, we realize how impossible it is to eliminate all emotion from argument. As you read the many argument essays in this book, study the emotional material that professional writers use. Try to develop a sense of when emotion contributes to argument in effective and appropriate ways and when it does not. In general, emotional proofs are appropriate in argument when the subject itself is emotional and when it creates strong feelings in both the writer and the reader. For writers of argument, emotion leads to positions on issues, influences the tone of the writing, and informs some of the interpretations. For readers, emotion leads to a stronger engagement with the issue and influences the final outcomes. Emotional proof is appropriate when the occasion justifies it and when it strengthens logical conviction. It is inappropriate when it merely gives vent to feelings, serves as an ornament, or distracts the audience from the logical conclusion of the argument. Types of emotional proof focus on *motivation*, what all people want, and on *values*, what we consider good or bad, favorable or unfavorable, acceptable or unacceptable.

MOTIVATIONAL PROOFS

Some proofs appeal explicitly to what all audiences are supposed to want, such as food, drink, warmth and shelter, sex, security, belongingness, self-esteem, creativity, or self-expression. Authors also sometimes appeal to (or through) the opposites of these needs and values, relying on hunger, cold, fear, self-doubt, boredom, or other types of dissatisfaction to motivate people to change their behavior and restore themselves to a more positive state of being. Advertisements aimed at convincing young people that they should avoid taking illegal drugs often show the negative effects of drugs to appeal to people's fears. The purpose of motivational proof is to urge the audience to take prescribed steps to meet an identified need.

Examples of Motivational Proofs

Advertisements and speeches by political candidates provide obvious examples of motivational proof. Drink a certain beer or buy a brand of blue jeans, and you will be irresistible to others. Similarly, support a particular candidate, and you will personally gain job security and safe neighborhoods.

Claim: You should support this candidate.
Support: This candidate can help you get job security and safe neighborhoods.
Warrant: You want job security and safe neighborhoods.

Claim and Support

To find the claim, look for what you are asked to believe or do to get what you want.

Motivational Warrants

Look for references to items or qualities that you might need, want, or fear.

Tests of Validity

What am I supposed to need or fear? Do I really need it or fear it? What am I supposed to do? Will doing what is recommended satisfy the need in the ways described?

VALUE PROOFS

Some proofs appeal to what all audiences are expected to value, such as fairness, reliability, honesty, loyalty, industry, patriotism, courage, integrity, conviction, faithfulness, dependability, creativity, freedom, equality, and devotion to duty.

Examples of Value Proofs

Here is an example that claims that a school curriculum can contribute to the values of equality and acceptance if it is multicultural.

Claim: The curriculum should be multicultural.
Support: A multicultural curriculum will contribute to equality and acceptance.
Warrant: You value equality and acceptance.

Claim and Support

Look for value statements that are generally accepted by everyone because they have been proved elsewhere many times. Examples include "Freedom of speech is our constitutional right," "There should be no freedom without responsibility," and "Individuals who have the courage of conviction are to be trusted." Look for slogans that display such values as "Honest Abe," "The home of the free and the brave," and "Honesty is the best policy." Or, look for narratives and examples that display values, such as the story of an industrious, thrifty, and ambitious mother who is unemployed. When the values are not directly stated, ask, "What values or beliefs are causing the author to say this?" Look for a claim that shows what will result if the recommended values are accepted.

Value Warrants

You are expected to assume that you share the author's values and that they are as important as the author says they are.

Tests of Validity

What are the values expressed or implicit in this argument? Do I share these values with the author? If not, how do we differ? What effect do these differences have on my final acceptance of the claim?

A MNEMONIC DEVICE

The mnemonic VAM (for *value, authority,* and *motivation*) may help you remember and use the proofs involving *ethos* and *pathos*.

LO5 Explain how language and style convey logic (*logos*), credibility (*ethos*), and emotion (*pathos*) in an argument.

Logos, *Ethos*, and *Pathos* Communicated through Language and Style

You can learn to recognize logic, *ethos*, and emotion in argument not only by the use of proofs but also by the language and style associated with each of these types of appeal. Actually, you will not often encounter pure examples of one of these styles, but instead you will encounter a mix, with one of the styles predominating. The same is true of writing. You may plan to write in a logical style, but emotion and *ethos* seep in and actually help you create a richer and more varied style for your argument.

LANGUAGE THAT APPEALS TO LOGIC

The language of logical argument, which is the language associated with reason, is sometimes called rational style. Words that carry mainly denotative meaning are favored in rational style over connotative and emotionally loaded language. The denotative meaning of a word is the commonly held meaning found in the dictionary. It is the meaning most people would agree on because to denote is to name or indicate specifically. Examples of words that have predominantly denotative meanings and that are emotionally neutral include *introduction*, *fact*, *information*, *question*, and *literal meaning*. Most people would agree on the meanings of those words and could produce synonyms. Words with strong connotative meaning may have many extra, unique, symbolic, or personal meanings and associations attached to them that vary from person to person. Examples of words with connotative meaning include *rock star*, *politician*, *mugger*, *family values*, and *human rights*. Asked to define such words, different people would provide meanings and examples that would not be exactly alike or match the denotative meanings of these words in a dictionary.

For support, rational style relies on opinion in the form of reasons, literal or historical analogies, explanations, and definitions and also on factual data, quotations, and citations from experts and authorities. Furthermore, the reader is usually not required to make as many inferences as for other, less formal styles of writing. Most parts of the argument are spelled out explicitly for the sake of agreement and better adherence of minds.

Slogans that elicit emotional responses, such as "America is the greatest country," "The American people want change," or "Now is the time for healing," are generally omitted in rational style. Slogans of this type substitute for logical thinking. Readers think better and draw better conclusions when provided with well-reasoned opinion, quotations from authorities, and facts.

For example, in the opening paragraph of an essay titled "The Lost Art of Political Argument," Christopher Lasch uses rational style to argue in favor of argument and debate.

> Let us begin with a simple proposition: What democracy requires is public debate, not information. Of course it needs information too, but the kind of

> information it needs can be generated only by vigorous popular debate. We do not know what we need to know until we ask the right questions, and we can identify the right questions only by subjecting our own ideas about the world to the test of public controversy. Information, usually seen as the precondition of debate, is better understood as its by-product. When we get into arguments that focus and fully engage our attention, we become avid seekers of relevant information. Otherwise, we take in information passively—if we take it in at all.[6]

Rational style, as you can see in this excerpt, evokes mainly a cognitive, rational response from its readers.

LANGUAGE THAT DEVELOPS *ETHOS*

Authors who seek to establish their own credentials and good character use language to provide a fair-minded view of reality that is restrained and accurate rather than exaggerated or overly opinionated. When language is used to create positive *ethos*, an audience will trust the author as a credible source of information and opinion.

Language that develops *ethos* has several specific characteristics. To begin with, the writer exhibits a consistent awareness of the audience's background and values by adopting a vocabulary level that is appropriate for the topic and the audience. The writer does not either talk down to or overwhelm the audience, use technical jargon for an audience unfamiliar with it, or use slang or colloquial language unless the context specifically calls for that. Rap music, for example, invites a different vocabulary level than a scholarly paper does.

Writers intent on establishing *ethos* are sensitive to different audiences and what they will admire, trust, and accept. They try to use language precisely and to say exactly what they mean. They project an honest desire to communicate by avoiding ranting, filler material that gets off the subject, or anything that the audience would perceive as offensive or repugnant.

As you have probably already realized, an author can destroy *ethos* and alter an audience's favorable impression by changing the language. A student who uses colloquial, everyday expressions in a formal essay written for a professor, a commencement speaker who shouts obscenities at the audience, a father who uses formal, abstract language to talk to his five-year-old—all have made inappropriate language choices for their particular audiences, thereby damaging their *ethos* with those audiences.

When you read argument, notice how an author uses language to build connections and trust as well as to establish reliability with the audience. When you write argument, use language that will help the audience regard you as sincere and trustworthy. Appropriate language is essential when you write a college paper. The use of slang, slogans, and street language and expressions in otherwise formal writing damages your credibility as a serious thinker. Writing errors, including

[6] Christopher Lasch, "The Lost Art of Political Argument," *Harper's*, September 1990, 17.

mistakes in spelling, punctuation, and grammar, also destroy *ethos* because they indicate a lack of concern and goodwill for your readers.

Here is an example of language that builds effective *ethos* with an audience. These excerpts come from Martin Luther King Jr.'s "Letter from Birmingham Jail" (pages 313–325). King was jailed because of his involvement in the civil rights movement in Birmingham, Alabama, and he had been criticized publicly for his participation by eight fellow clergymen of that city. He wrote this letter to those clergymen. Notice that he deliberately uses language that is sincere and honest and that establishes his credibility as a trustworthy and responsible human being with values his audience is likely to share. He does not come across as a troublemaker or a man who is angry at the system, as one might find with someone who has been jailed for participating in civil rights demonstrations. Rather, he comes across as thoughtfully conscious of his actions and ethically bound to participate as he is.

> My Dear Fellow Clergymen:
>
> While confined here in the Birmingham city jail, I came across your recent statement calling my present activities "unwise and untimely." . . . Since I feel that you are men of genuine good will and that your criticisms are sincerely set forth, I want to try to answer your statement in what I hope will be patient and reasonable terms.
>
> I think I should indicate why I am here in Birmingham, since you have been influenced by the view which argues against "outsiders coming in." . . . I, along with several members of my staff, am here because I was invited here. I am here because I have organizational ties here.
>
> But more basically, I am in Birmingham because injustice is here. Just as the prophets of the eighth century B.C. left their villages and carried their "thus saith the Lord" far beyond the boundaries of their home towns, and just as the Apostle Paul left his village of Tarsus and carried the gospel of Jesus Christ to the far corners of the Greco-Roman world, so am I compelled to carry the gospel of freedom beyond my own home town. Like Paul, I must constantly respond to the Macedonian call for aid.
>
> Moreover, I am cognizant of the interrelatedness of all communities and states. I cannot sit idly by in Atlanta and not be concerned about what happens in Birmingham. Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly. Never again can we afford to live with the narrow, provincial "outside agitator" idea. Anyone who lives inside the United States can never be considered an outsider anywhere within its bounds.

Highlight the language in these passages that you think King used to establish good *ethos* with the eight clergymen. Notice how King deliberately uses language to project sincerity and goodwill toward this audience. He also selects examples and appeals to values that are compatible with their interests and values. King's letter is a classic example of argument that establishes effective *ethos* with a particular audience.

LANGUAGE THAT APPEALS TO EMOTION

References to values and motives summon feelings about what people regard as good and bad and about what they want, and authors use the language associated with emotional style in a variety of ways to express and evoke feelings about these matters. The following paragraphs describe a few special techniques that are characteristic of emotional style. Examples of each are drawn from the essay in Chapter 5 titled "When It's All Too Much," on pages 173–175.

Emotionally loaded language evokes connotative meanings and causes the audience to experience feelings and associations at a personal level that are not described in dictionaries. Here is an example: "I was stunned. A moment or two later, I sputtered out something like, 'I just want regular jeans. You know, the kind that used to be the only kind.'" Underline the words and phrases in the sentence that draw forth your emotions.

Emotional examples engage the emotions, as in this example: "For example, people in one study were asked whether, if they got cancer, they would want to be in charge of their treatment decisions; 65 percent said yes. Unless, however, they actually had cancer. Then only 12 percent said yes. People with cancer have experienced awesome psychological consequences of being responsible for a life-and-death decision, and they don't want that responsibility." Most readers can understand this type of consideration.

Vivid description of an emotional scene creates an emotional reader response, as in this example: "I have a friend who makes going out to dinner a nightmare. He struggles to select a dish and changes his mind repeatedly as his companions sit and stew. And I see my students agonize over which of many paths to follow when they graduate. Many of them are looking for jobs that will give them everything, and they expect to find them." Notice how this description brings you into the scene, causing you to better understand the point the author is making about his own students.

Emotional tone, created by emotional language and examples, indicates that the author has a strong feeling about the subject and wants the audience to share that feeling. Here is an example: "Here we are, living at the pinnacle of human possibility, awash in material abundance. We get what we want, only to discover that it does not satisfy us."

Figurative analogies contribute to emotion in an argument, particularly when two emotional subjects are compared and the resulting effect appeals more to emotion than to reason. For example, the author sums up his argument in the following way: "The success of 21st-century life turns out to be bittersweet." The comparison of modern life and a "bittersweet" edible is supposed to have an emotional effect on the reader.

Emotional style is the easiest of all the styles to recognize because it uses charged language and is often close to our own experiences. Do not become distracted by emotional material or use it excessively in your own arguments. Remember, in argument, logic is the plot and emotion and *ethos* add support. Box 6.1 provides a summary of the characteristics of language used to appeal to reason, to establish *ethos,* and to appeal to emotion.

Box 6.1 A Summary of Language and Style in Argument

How Do You Make Appeals in Argument?

TO APPEAL TO LOGIC	TO DEVELOP *ETHOS*	TO APPEAL TO EMOTION
	Style	
Theoretical abstract language Denotative meanings Reasons Literal and historical analogies Explanations Definitions Factual data and statistics Quotations Citations from experts and authorities Informed opinion	Language appropriate to audience and subject Restrained, sincere, fair-minded presentation Appropriate level of vocabulary Correct grammar	Vivid, concrete language Emotionally loaded language Connotative meanings Emotional examples Vivid descriptions Narratives of emotional events Emotional tone Figurative analogies
	Effect	
Evokes a cognitive, rational response	Demonstrates author's reliability, competence, and respect for the audience's ideas and values through reliable and appropriate use of support and general accuracy	Evokes an emotional response

Analyzing Online Argument: The Use of Proofs

In our multimedia environment, proofs come in a variety of forms. Here is a set of steps you can follow to identify and analyze logical, emotional, and *ethos*-based proofs in an online context:

Step 1: Find an Online Argument and Identify the Proofs

- Which proofs are evident: *logos, pathos,* or *ethos*?

Analyzing Online Argument: The Use of Proofs (*continued*)

Step 2: Describe the Medium in Which the Proofs Are Found

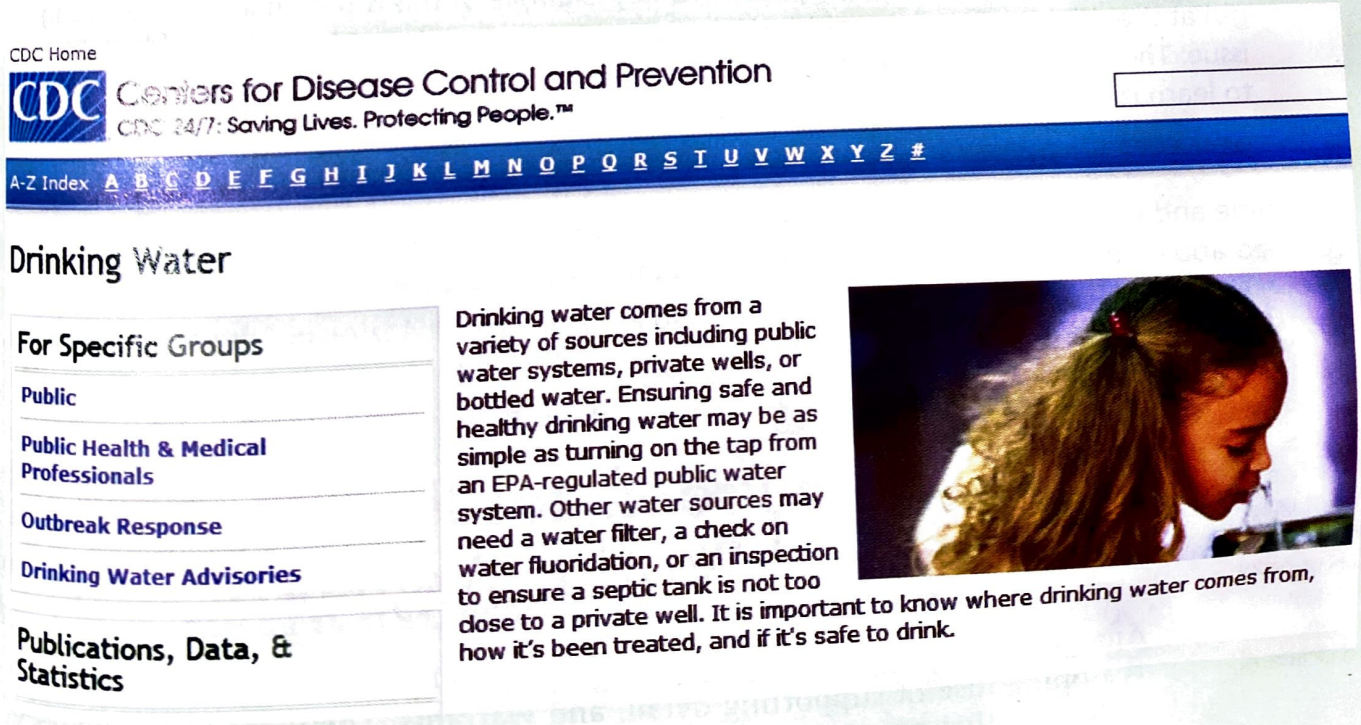
- Are you examining a Web site, social media post, online video, email, or some other form of online argument?

Step 3: Identify the Multimedia Features Used to Present the Proofs

- What multimedia elements are used to convey the proofs?

Example

To learn how these steps can be put into practice, let's look at a specific example. The screenshot below comes from a Web site for the Centers for Disease Control and Prevention, a federal government agency tasked with monitoring and ensuring the health and safety of the American public. Look over this selection carefully, as well as the discussion that follows. How does this sample provide a model for analyzing proofs in a digital context?



continued

Analyzing Online Argument: The Use of Proofs (*continued*)

Step 1: Find an Online Argument and Identify the Proofs

- This Web site employs logical, emotional, and *ethos*-based proofs. The key logical proof involves the cause-and-effect relationship between the CDC's call to verify the quality of water sources on the one hand, and ensuring public health and safety on the other. The emotional proofs here revolve around the image of the young girl drinking from a water fountain, a visual designed to evoke viewer interest and sympathy. The *ethos*-based proofs can be found in the information about the CDC's mission and goals.

Step 2: Describe the Medium in Which the Proofs Are Found

- The Web site is the homepage for the Center for Disease Control and Prevention, a federal government agency tasked with ensuring public health and safety.

Step 3: Identify the Multimedia Features Used to Present the Proofs

- A number of the Web site's textual elements are used to present its cause-and-effect proof. Among them is the statement "Ensuring safe and healthy drinking water may be as simple as turning on the tap from an EPA-regulated public water system." The Web site uses visual imagery to present its emotional proof. The key example of this is the image of the young girl at the drinking fountain, which raises viewer awareness about the seriousness of this issue. The Web site uses its interactive features to establish its *ethos* proofs, allowing viewers to learn more about the CDC's work and mission.

Activity

Go online and find examples of arguments that employ each of these proofs. Then use the steps outlined above to analyze how each of these arguments uses its proof.

LO6 Define the value of using these three types of proof for assessing written, visual, and online argument.

Value of the Proofs for Reading, Viewing, and Writing Argument

Analyzing the proofs in an argument focuses a reader's attention on the author's reasoning, use of supporting detail, and warrants. These are the elements in an argument that convince an audience. Applying the tests of validity to the proofs can also help a reader recognize faulty reasoning, which can sometimes reveal a manipulative or immoral purpose in the argument. You will learn more about faulty reasoning in the next chapter. It is not convincing once you figure out how it works.

Viewers of argument, just like readers, should first establish whether a visual image or a Web-based text presents a position on a subject that is open to different interpretations and vantages or serves restrictively as support for a particular position, and then make an attempt to state the claim and analyze the proofs that support it. Look for the ways in which the creator of the image or text appeals to your reason, to your sense of fairness and goodwill, and to your emotions. Warrants and backing will also be present in visual and multimedia arguments. Analyze them to gain further insight into the image as argument. You can also apply the tests of validity to visual argument, just as you would with written argument.

Writers of argument can use the proofs to help them think of ways to develop a claim. By running through the list of proofs and asking relevant questions—What do I need to define? Should I use statistics? Can I generalize from some examples? What caused this? To what can I compare this? Whom should I quote? To what audience values and motives can I appeal?—authors invent and structure ideas and locate material to be used at the concrete, specific level in a paper. The specific material is what makes a paper convincing. Also, thinking about the proofs makes authors more consciously aware of their own warrants and helps them decide whether to make the warrants explicit in the argument or whether to leave them implicit so that the audience has to supply them. Finally, an awareness of proofs can help writers avoid inadequate or irrelevant proof and faulty reasoning in their writing.

The exercises and activities for this chapter will provide you with practice in using the proofs to invent support and warrants for a position paper. The proofs and the tests for validity are summarized for readers, viewers, and writers in the Summary Charts on pages 428–433.

Review Questions

1. Describe logical proofs. Name the seven types of logical proof. (Use the mnemonic SICDADS to help you remember them.) **(LO2)**
2. Describe proofs that build *ethos,* or credibility. Name one type of proof that builds *ethowt.* **(LO3)**
3. Describe emotional proofs. Name two types of emotional support and explain why they appeal to the emotions. **(LO4)**
4. Describe some of the features of the language and style associated with the three types of proof. **(LO5)**
5. How does visual argument employ the proofs? Give an example. **(LO6)**

Exercises and Activities

A. Class Discussion: Analyzing *Logos, Pathos,* and *Ethos* in an Advertisement

Study the advertisement on the next page (Image 1), and identify the logical proofs, the emotional proofs, and the proofs that establish *ethos.* Use the mnemonics SICDADS and VAM to help you remember the proofs. Which type of proof is strongest in this public service announcement, in your opinion? How effective is this message overall? Why do you think so?