Chapter 2: ARGUMENTS AND LANGUAGE

However elegant and memorable, brevity can never, in the nature of things, do justice to all the facts of a complex situation . . . . Abbreviation (though) is a necessary evil, and the abbreviator's business is to make the best of the job which, though intrinsically bad, is still better than nothing. He must learn to simplify, but not to the point of *falsification. He must learn to concentrate upon the essentials of a situation, but without ignoring too many of reality's qualifying side issues. In this way he may be able to tell, not . . . the whole truth . . . but considerably more than the dangerous quarter-truths and half-truths which have always been the current coin of thought.* Aldous Huxley, ***Brave New World Revisited***

Recognizing Arguments

In Chapter 1 we saw how logicians use the term ***argument*** in a technical way to refer to a formalized presentation of a reasoning trail. In everyday life, people argue about all sorts of things, and what they argue about is usually much messier and more involved than the neatly packaged formalizations found in logic texts. To conduct logical analysis we must be abbreviators in the sense described by Huxley above. However, abbreviated logical formalizations can be very important. We also saw in Chapter 1 that when something is very important to us, it is useful to break up a complex appeal into pieces, to analyze a perplexing situation into simple parts to see if they fit together correctly.

This implies that we are not just interested in analyzing quarrels or arguments as in "John and Kym got into an argument." A logical argument is not limited to disagreements between one person and another, or between one group and another. Arguments can also be objective, formal presentations of reasoning trails that are studied by people who already accept the conclusions, as in science and mathematics, where the goal may be shorter, tighter, more elegant presentations of systems of belief. In mathematics and logic, proofs or arguments can also be created like an artist creates a beautiful statue, to try to say something clearly, to bring out a perspective, or to make a discovery for the appreciation of others. You will be given a taste of this creative activity in some of the later chapters on symbolic logic (9, 10, 11), where your goal will be to create proofs (symbolic trails of reasoning) for arguments we already know to be valid.

Analytic thinking is often contrasted with synthetic or holistic thinking. When we analyze, we take a whole and break into its parts (some would say we destroy it). In synthetic thinking, we take or are given parts and details and (if we are lucky, brilliant, or insightful) create a perspective that brings the parts into a new light. Synthetic thinking is

often associated with so-called artistic thinking, and some philosophers have worried that too much analytic thinking ruins one's ability for synthetic thinking. This may be so, and we will adopt the view that both of these ways of thinking are valuable tools that are part of our potential as human beings, and that like any tool, using one for every task is surely a mistake.

Clearly though, as the examples from Chapter 1 show, many people reason too holistically for some situations -- they just react without stopping to see whether they have good reasons for their reactions. In Chapter 1 we made life easy for you by structuring arguments into conclusions and premises. In this chapter, you need to begin the process of recognizing different types of arguments and formalizing them. You will then practice argument recognition throughout the remaining chapters of this book.

In formalizing arguments and learning other analytic techniques presented in this book, you will actually be learning more than specific skills. You will also be learning a strategy or discipline of mind with which to face complexity, a most valuable ability in a world of increasingly abundant diverse ideas and opinions. Today you will often hear employers speaking of a person's "information processing skills." In our Internet age the information available to us often appears to be overwhelming. To be able to sort out and "corral" this information into to useful principles and concepts and to be able to reason through it all to take appropriate actions are major skills that require being able to create abstractions and abbreviations. In a democracy, we assume also that a clash of ideas and opinions is necessary for better ideas to emerge, but we also assume that better ideas can only emerge if the exchange of ideas is rational and focused.[1]

To evaluate an argument's reasoning we must first recognize its parts. Every argument has its "bottom line" or "main thrust," a basic point that its author wants to persuade us to accept. We call this basic point the *conclusion*. The elements of persuasion, or the reasons given for us to accept the conclusion, we call *premises*. In general, arguments have a tone like

"This is so (conclusion), because that is so (premises)."

Or

"Because this is so and this is so (premises), therefore you should believe such and such (conclusion)."

In recognizing an argument's parts, as a strategy of analysis, the first thing you should do is avoid the temptation to react to individual statements. (Remember the problem with 1-7 in Chapter 1.) Try to understand before you judge. Ask yourself what the ultimate point of a passage is; try to determine what the author is trying to get us to accept. What is the

[1] Often the formalization or abbreviation process itself helps a great deal to achieve this goal, because some exchanges of ideas are too "full"; full of excess and tortuous verbiage, that is. See example 2-20 below.

main point of the argument? Consider the following two arguments and write on some notebook paper what you think the conclusion is for each one.

EXAMPLE 2-1

We all know a democracy must guarantee freedom of speech to all citizens. However, some citizens of a democracy use their freedom of speech to attack the concept of a democracy. At times of great trial, be it war, economic upheaval, or confusion brought on by rapid change, such attacks can pose a serious threat to a democracy's survival. Thus, a true democracy will always be vulnerable to destruction from within.

EXAMPLE 2-2

The Bush administration's justification for our military role in the Middle East was that a small, defenseless country, Kuwait, was brutally invaded by Iraq, which possessed the fourth largest military force in the world. Should such a justification have been accepted by anyone? Syria invaded Lebanon, and we did nothing. Turkey invaded Cyprus, and we did nothing. Israel invaded and pirated land from Egypt, Jordan, and Syria, and we did nothing. The Chinese government brutalized a blossoming democratic movement, and we not only did nothing, we encouraged it by continuing business and trade as usual. The former Soviet Union intimidated its Baltic neighbors, and we did nothing. Besides, Kuwait was a backward dictatorship itself, stole oil from Iraq, and lied to the World Bank about their monetary support for Iraq during the Iran-Iraq war. Not to mention that until shortly before Iraq invaded Kuwait we were supporting Iraq militarily.

Notice that these passages have the tones we talked about above. The first one follows the pattern of "Because this is so and this is so (premises), therefore you should believe such and such (conclusion)." The author of this argument helps us identify the parts of the argument by using the ***conclusion indicator*** word 'thus.' The conclusion of the first argument is, "Thus, a true democracy will always be vulnerable to destruction from within." The use of language to communicate is not always successful and we need all the help we can get in understanding each other. Arguments often have "neon lights." Conclusion or ***premise indicator****s,* or both, highlight parts of the argument.

Examples of ***conclusion indicators*** are:

therefore, so, hence, thus, accordingly, consequently, it follows that, we can infer that, which entails that, which implies that, it is clear that, it is obvious that.

Examples of ***premise indicators*** are:

because, since, in as much as, given that, for the following reasons, follows from, may be inferred from, may be deduced from, may be derived from.

Here are some more examples similar to 2-1. Notice how we are helped to see the argument structure (premises and conclusion) by indicator words.

EXAMPLE 2-3

A necessary condition for universal moral judgment is the existence of universal moral principles. But the establishment of universal moral principles is possible if and only if there is an objective method for ethical judgment. If there is one clear anthropological fact it is that of cultural relativism -- there are vast differences amongst the world's cultures as to what is considered right and wrong. **So**, we don't have the right to judge those societies that still practice female circumcision.

EXAMPLE 2-4

We do have a right to judge any culture that still practices female circumcision. **Because** justice is justice and fairness is fairness. It does not matter that judgments of right and wrong are culturally relative. Slavery is wrong, period. It does not matter that it was once popular. We have learned over the millennia that there is no inherent difference between the so-called races of people on this planet. We have also learned that there is no inherent intellectual difference and moral worth between the sexes.

EXAMPLE 2-5

If you are the chief of intelligence for a tyrant, then you will always be in trouble. **This is so, because** if you tell the tyrant the truth and it contradicts his sense of infallibility, you will be in trouble. If you tell the tyrant only what he wants to hear, time will inevitably expose your lies and you will be in trouble. A chief of intelligence either has to tell the truth or lie.

The word 'so' indicates that the author of 2-3 wants this sentence to be his or her main point (conclusion) supported by all the other sentences as premises. The word 'because' indicates that the author of 2-4 wants the first sentence to be his or her main point (conclusion) and that all the sentences after 'because' are the reasons for his or her conclusion. Like neon lights, the phrase "this is so, because" is particularly helpful in 2-5. The word 'so' is a conclusion indicator and the word 'this' refers back to the first sentence. So we know the first sentence is the intended conclusion. Then the word 'because' shows us that the remaining sentences are premises.

Argument 2-2 is much harder to formalize but if you think about it carefully you can see that it follows the pattern "This is so (conclusion), because that is so (premises)." This argument is typical of the much less formal situations that we find in everyday exchanges of ideas. There are no neon lights to tell us exactly what the author has in mind as a conclusion. In fact, the conclusion is not even explicitly stated, and we must interpret the author's major point. Identifying the conclusion in such passages tests your

communication ability -- particularly your understanding of the language used. It also will often draw on your experience or knowledge of what is being discussed. The less you know about the world, the more difficult it will be for you to understand what you read. Because logical ability and language ability are very closely related, the most important thing you can do to enhance your reasoning ability and your own defensive verbal skill is to learn to read and write better.

Even being well-informed and reading well will not ensure successful communication between people. Often, two people can use language correctly and still not understand each other due to the complexity of their topic, their different perspectives, cultures, values, or different experiential backgrounds. In such cases, communication is an ongoing process that takes work. Often follow-up discussion is needed, and sometimes we just need to ask the author of an argument: "What is your point?" "What conclusion do you want me to accept?"

What is the author's major thrust in 2-2? The author obviously doesn't think much of the first Bush administration's (George W's father) justification for our involvement in the Persian Gulf War (1990). The Bush administration's position is stated and then followed by the question, "Should such a justification have been accepted by anyone?" This is a rhetorical question, a question that implies its own answer. In this case the implied answer is "No." The author is saying that no one ought to have accepted such a justification, and following the rhetorical question are the author's reasons why we should not accept such a justification, along with an implied premise that our policy did not appear consistent. In such cases we must paraphrase the implied conclusion and premise; we must restate it in our own words in an attempt to capture the essence of what is implied as best we can. Here is a possible formalization:

EXAMPLE 2-2a

Conclusion (implied):

The Bush administration's justification for our military role in the Middle East was weak. (We shouldn't believe that the only reason for our involvement was that a small, defenseless country, Kuwait, was brutally invaded by Iraq, which possessed the fourth largest military force in the world.)

Premise (also implied):

This justification did not make sense in light of our past and present actions and was too simplistic in terms of Iraq-Kuwait relations.

Premises (remaining):

Syria invaded Lebanon, and we did nothing. Turkey invaded Cyprus, and we did nothing. Israel invaded and pirated land from Egypt, Jordan, and Syria, and we did nothing. The

Chinese government brutalized a blossoming democratic movement, and we not only did nothing, we encouraged it by continuing business and trade as usual. The former Soviet Union intimidated its Baltic neighbors, and we did nothing. Kuwait was a backward dictatorship, stole oil from Iraq, and lied to the World Bank about their monetary support for Iraq during the Iran-Iraq war. Until shortly before Iraq invaded Kuwait we were supporting Iraq militarily.

We could disagree about whether this is an accurate presentation of the author's intentions. We could argue about it, and we could nit-pick over some of the words used. But in most cases the context and the language used imply at least a focused range of interpretations that are close to saying the same thing. The interpretation of arguments is not always a black-and-white process and like most things in life sometimes there is considerable room for reasoned disagreement. The point is to get down a formalization in the form of "This is so (conclusion), because that is so (premises)." Then we can begin to discuss whether the formalization is accurate and evaluate the argument. As soon as the argument has more focus, then we can be more disciplined in analyzing its parts and the inferential linkage between its parts.[2] Are the premises relevant to the conclusion? Do they give us good reasons to accept the conclusion? What is the relationship between the conclusion and the premises? Is a deductive or inductive relationship asserted? Are the premises true?

Notice that a fully logical approach to such an important matter as a war decision would require slowing our thinking down considerably.

First we ask, what is the argument? What is the conclusion? What are the premises? Second, we judge the reasoning. If the premises of 2-2a are true, do they provide a good basis for the conclusion? Even if they do, do we know the premises are true? Do you know if it is true that Kuwait stole oil from Iraq? What does the possible lying to the World Bank have to do with the argument? Was this true? Is it historically true that the United States once supported Saddam Hussein militarily? So, third, we need to know if the premises are true. In short, to fully critically appraise such an important matter, one would need to not only understand a little logical analysis, but to be informed about the world (history, culture, geography, and so on) and the big picture as well. Hopefully these are goals of a college education.

Other Uses of Language

Before we go any further, we must recognize the obvious point that we don't argue all the time. Often, in my logic class, after a few days of analyzing suspect advertisements similar to those in Chapter 1, some of my students conclude that they can now find bad arguments everywhere they look. With excited anticipation of reward and confirmation

[2] Even if we disagree on the interpretation of an argument, at least the argument interpretation that we do have can be discussed. Even if we have misunderstood the author's intention, we can learn something by analyzing the reasoning of our interpretation.

that they have now achieved a special status above the masses, they sometimes come into my office after class and share with me what they consider obvious blunders of human reasoning. "Isn't this the stupidest thing you have ever heard?" one might say. Then I usually have to disappoint them with something like "Yes, based on what is considered to be scientific fact, those beliefs are silly. But there is nothing wrong with the logic, because there isn't any; I don't see a presentation of an argument. Perhaps there is one I am not seeing. Why don't you look at it again for homework, and see if you can interpret an argument in terms of premises and a conclusion."

I respond this way because often the passages found by students do not appear to be arguing about anything, but rather are alleged descriptions, statements of belief or opinion, or explanations, or bare value judgments without any support offered that the descriptions are true, the explanations the best possible, or the value judgments acceptable. Descriptions can be false, explanations can be incorrect, and values poor or unacceptable, but they are not arguments by themselves. For an argument to be bad we must have a group of statements that can be analyzed into premises and a conclusion, where an inferential claim is made that the conclusion, although controversial, should be accepted because of the evidence offered in the premises.

Here are some examples of the use of language that are not arguments:

EXAMPLE 2-6

The Sun is about 4.6 billion years old. This is a lengthy time, and roughly half the stars in our galaxy are younger than the Sun. We should also keep in mind that at least half the stars in our galaxy are part of binary star systems. ***(Description)***

EXAMPLE 2-7

The World Trade Center towers collapsed completely on 9/11, because the large impact load destroyed the fire resistant foam protecting the steal, and the fire and temperature (2000 degrees F) then caused a failure of the truss system supporting several floors, and the floors below could not support the tremendous weight of the floors falling from above. ***(Explanation)***

EXAMPLE 2-8

Homosexuality is immoral. I can't help being shocked when I see two men walking down the street with their arms around each other. I am dismayed when I can't help imagine what they do behind closed doors. ***(Value judgment)***

The first statement is a typical factual description of what astronomers believe to be true about our sun and galaxy. Although scientists believe there is an enormous amount of

evidence to substantiate these statements as true, none of that evidence is presented here. So, there is no argument. However, these statements could become part of an argument, such as when the possibility of extraterrestrial intelligence is discussed or when these statements are challenged by very conservative fundamentalist Christians who do not believe the universe can be this old.

Here is an example of how some of the statements in 2-6 can be used as part of an argument:

EXAMPLE 2-6a

The Sun is about 4.6 billion years old. This is a lengthy time and because the Earth was formed with the Sun, **it follows that** on Earth intelligent life took at least this long to evolve.

Notice that the factual statements are now linked by a conclusion indicator ("it follows that") to a relatively bold generalization, that intelligent life on Earth required billions of years to evolve.

The use of the word ***because*** in 2-7 shows that language is flexible and words that we have designated as conclusion and premise indicators do not always function as indicators for parts of arguments. In an explanation, that part of a statement that is in the same apparent location of a conclusion is usually an accepted fact regarding an objective event that has taken place and is not controversial. In 2-7 no one is arguing about whether the World Trade Center towers really collapsed. This horrifying scene was seen by millions of people. But there was much engineering controversy for several months after 9/11 on the exact causal details. So, here what follows the 'because' is much more controversial than that accepted fact stated before the 'because.' In an argument, the situation is reversed: what follows the premises indicators should be less, or at least no more, controversial than the conclusion.[3]

Thus, a rule of thumb for separating arguments from explanations is to first formulate the passage into the form "X, because Y." Then ask yourself if X is more controversial than Y. If the answer is yes, then it is most likely an argument. If the answer is no, then it is most likely best analyzed as an explanation.

In 2002, President Bush said that the 9/11 World Trade Center attack occurred in part because it was "clear that the FBI and the CIA were not cooperating." Bush's statement would be classified as an explanation, not an argument. Note the form -- X happened (the 9/11 attack) because Y occurred (lack of FBI and CIA cooperation). Note that X is not controversial. No one was arguing that 9/11 was a myth or hallucination. It was a

[3] In general, when we attempt to persuade logically we should present evidence that we think will be accepted as true or noncontroversial. Arguments, however, can also be used to test controversial ideas by deducing or discovering implications to test. But this use of argument is different from direct persuasion. We will discuss this difference in more detail in Chapter 5 with the fallacy of Slippery Slope.

very big tragic fact for the United States. What might have been controversial was Bush's explanation, but he offered no argument for it.

It is easy to get confused on whether something is an argument, an explanation, or a value judgment, because arguments and explanations can contain value judgments. But consider this example.

A few days after 9/11, the very conservative religious fundamentalists Jerry Falwell and Pat Robinson seemed to assert on Robinson's TV show that an angry God, angry at the United States, had allowed the terrorist acts to succeed. Falwell then said,

"I really believe that the pagans, and the abortionists and the feminists, and the gays and the lesbians who are actively trying to make that an alternative lifestyle, the A.C.L.U., People for the American Way, all of them who have tried to secularize America, I point the finger in their face and say, 'You helped this happen.'"

Clearly, even though value judgments and controversial beliefs are involved, this exchange can be rendered as an explanation.

EXAMPLE 2-9

The destruction of the World Trade Center towers by terrorists occurred because God was angry at the United States for allowing abortion, feminism, and accepting homosexuality as an alternative lifestyle.

X, because Y

X = The destruction of the World Trade Center towers by terrorists occurred.

Y = Because God was angry at the United States for allowing abortion, feminism, and accepting homosexuality as an alternative lifestyle.

Because the X-part is not controversial, we have an explanation. The Y-part implies a value judgment – that abortion, feminism, and the acceptance of homosexuality as an alternative lifestyle are wrong. But overall we still have an explanation.

Some students will be confused because the value judgment part is so controversial that they conclude this has to be argumentative and hence an argument. No, argumentative, yes, in the sense of "inviting" an argument, but an argument no, because there is no argument yet. If Falwell was challenged on how he knows what God feels about abortion, feminism, and homosexuality, he might give the following argument.

EXAMPLE 2-10

Abortion, feminism, and the acceptance of homosexuality as an alternative lifestyle are wrong, because there are many passages in the Bible that make clear God's feelings on these matters, and the Bible is the word of God.

Now we have the argument:

Conclusion: Abortion, feminism, and the acceptance of homosexuality as an alternative lifestyle are wrong.

Premise: Because there are many passages in the Bible that make clear God's negative feelings on these matters and the Bible is the word of God.

Notice the key difference between 2-9 and 2-10. Falwell is not trying to prove that destruction of the World Trade Center towers by terrorists occurred (2-9), but he is trying to prove that abortion, feminism, and the acceptance of homosexuality as an alternative lifestyle are wrong (2-10).

Often, relatively vague passages can be analyzed by testing different interpretations. For instance, consider the following:

EXAMPLE 2-11

There are no hummingbirds in this area. We haven't seen any hummingbirds all day.

Is this passage a description, an explanation, or an argument? It is probably not a description, because a link of some sort seems to exist between the two statements. But is it an explanation or argument? Should we interpret this passage to mean:

EXAMPLE 2-11a

(We can conclude that) There are no hummingbirds in this area. (Because we know that) We haven't seen any all day. ***(Argument)***

Or

EXAMPLE 2-11b

We haven't seen any hummingbirds all day (fact to be explained), because there are no hummingbirds in this area. ***(Explanation)***

Like a blurry picture we are given no context for 2-11, so we must imagine a context in which this statement was made. There are at least two possibilities. For an argument (2-11a), perhaps some people have been hiking in a forest and they notice that no one has

seen any hummingbirds. One of the members of the group infers (generalizes) from this accepted fact that there are no hummingbirds in this area. For an explanation (2-11b), we can imagine someone noticing that they have not seen any hummingbirds all day and asking other members of the group why this is so. Another member then explains that there are no hummingbirds in this area.

This example shows that although recognizing arguments will not be a simple black-and-white affair, we can have guidelines for analysis and discussion. In both cases, the statement, "There are no hummingbirds in this area" is more controversial than "We have not seen any all day." But in a context of persuasion, when we are identifying arguments, we are looking for a controversial statement that is supported by reasons for accepting that statement. Because in 2-11b, no support is offered for the statement "There are no hummingbirds is this area," this interpretation is not an argument.

Context, background knowledge, experience, and cultural differences can all play roles in interpreting, recognizing, and understanding arguments. Recognizing arguments is part of the general task of intelligent and respectful communication, and it will often involve some work. Furthermore, in today's shrinking, interconnected, multicultural world we may not always be successful. However, we at least have a general guideline to help us with some of this complexity. Although technical arguments in logic, science, and mathematics do not always involve controversy in the same sense that we have been discussing, in recognizing arguments in the popular media the focus is most often on controversy. So, in recognizing arguments a helpful guide is to ask, "Is a controversial statement made (the conclusion), and is some alleged support offered for the acceptance of that statement (the premises)?"

Speaking of controversy, clearly, discussions of values and moral judgments are a vital but argumentative part of life. In 2-8 the volatile issue of sexual orientation is raised. But is this an argument? Although it appears to have something like a conclusion, a bottom line that the author wants us to accept -- "Homosexuality is immoral" -- the statements that follow do not appear to be supporting premises, but rather elaboration of the author's values in sexual matters. No reasons are offered for why we should have the same reaction to the gay life-style, or why we should not accept it as a permissible life-style, even if we share the author's heterosexual orientation. At this point, 2-8 is only a ***bare*** value judgment and today an extremely controversial one. Consider that a person making this statement today would probably be criticized for bigotry or having views that discriminate against gays. Times change and values change. In the 1960s almost every state in the United States made homosexual sex illegal and castration for men was the punishment for homosexual sex in seven states! What is called today "gay rights" was non-existent. No federal or state laws protected gays from job or housing discrimination.

It does not follow from this example that values cannot be argued about, that they are merely expressions of subjective feeling, time, and culture, and that they cannot become part of reasoned discussion. Values can change for good reasons, involving knowledge of new facts and progress and growth in better understanding.

Socrates (470-399 B.C.), one of the first Western philosophers, began his famous questioning with value issues. Prior to his gadfly antics in the city streets of Athens to make people think, Socrates was a soldier. He witnessed firsthand the violence and cruelty of which human beings are capable. Prior to Socrates, the philosopher Protagoras (ca. 485-410 B.C.) had claimed that the values and virtues that a society deem good are only so relative to that society, and it is presumptuous of a culture to believe that its way of seeing things is the only right way of living. The values we possess, according to Protagoras, are the result of our cultural conditioning and individual circumstance; what is true for you is true for you, and what is true for me is true for me. Socrates agreed with Protagoras that most people are presumptuous to believe that their values are the best, especially when we see that if they are forced to defend them, the reasons they give are very weak, usually based only on appeals to tradition, authority, or popularity. But because of his life as a soldier, Socrates reasoned that although there may be many different good ways to live, surely there are also many bad ways to live. If so, he reasoned, what general idea about what is "good" enables us to judge some particular way of life as good or bad? If there are no general principles that all people ought to accept, then "anything goes," and there is no such thing as a bad way to live.

Protagoras and Socrates ultimately disagreed. Protagoras was what philosophers call a ***relativist***. Relativists believe that objectivity is a myth; that there are no independent facts or values that everyone ought to accept; that truth and value are relative to the individual and cultural context. Protagoras believed that we cannot *reason* about values, we can only attempt to creatively *persuade one* another to see a way of looking at things. For Protagoras, life is a battle of perspectives and the goal of all discussion is more like art than science and logic -- to mold reality from a particular perspective and to persuade others to adopt this perspective. Socrates was not a relativist; he established the foundation for ***normative ethics***. The normative ethicist believes that some values (norms) can be judged as better than others; that values can be part of an objective rational discussion.

Many of my students, when hearing this issue for the first time, conclude that they are relativists, because they believe that Protagoras was right, that cultures do differ, and that we "ought" to learn to respect and be tolerant of other life-styles. But a little reflection shows that they are not relativists. They are really adopting a normative principle: We ought to value, learn from, and be tolerant of different ways of living. A consistent relativist is committed to saying that this principle is no better than one that says we ought not to value, learn from, and be tolerant of different ways of living.[4]

The basic principles of democracy are not based on relativism. Generally people who support democracy as the best form of government are doing so because like Socrates they believe we can give some meaning to the phrase “a really right way of living.”

[4] A consistent relativist is also committed to believe that any method of inquiry, any method of arriving at beliefs is as good as any other. This implies that we don't learn about the world or even learn better ways to learn about the world. Most philosophers of science believe that scientific inquiry and the many methodologies devised by scientists throughout the centuries since the time of Socrates are examples of learning better ways of learning about the world. We will discuss this further in Chapter 3.

Although not all supporters of democracy believe in a personal God (generally Buddhists, who don't believe in a personal god, also support democracy as the best form of government), often political leaders in the United States will invoke a connection between democratic freedom and the objectivity assured if one believes in God. For instance, during the 2004 Republican National Convention, then president George W. Bush said, "(Democracy is) the most honorable form of government ever devised by man. . . . freedom is not America's gift to the world, it is the Almighty God's gift to every man and woman in this world. . . . we have a calling from beyond the stars to stand for freedom." Although there are other ways of supporting normative ethical positions (one will be defended at the end of this chapter), believing in God, and believing that we know what He wants, make up a very popular way of defending objectivity in value judgments.

Those who support freedom and democracy do not support absolute freedom. Relativists argue that because we can't justify any belief or value as absolutely true, "anything goes." But one can support freedom and respect for diversity but still call for a limit to tolerance.

For instance, in September of 2004 Chechen separatists (a "band of terrorists" for most of the world) held about a 1,000 children hostage at a school in the Russian town of Beslan. They were demanding that Russia give up its control of Chechnya. (Chechens are mostly Islamic and Russians are mostly Eastern Orthodox Christians.) The children were treated violently by their captors and almost 400 were killed brutally. (Some of the children were shot in the back as they tried to flee.) Sympathizers with the Chechen cause pointed to the Russian slaughter of innocent civilians in Chechnya (over 200,000) and the leveling of cities as an explanation for the violent response. But most of the world, including many Islamic countries, responded with outrage. A line had been crossed. Anything does not go. No matter the cause, no matter the prior injustice, there was no moral justification for brutalizing children this way.

Another source of possible confusion is that a normative ethicist is not saying that all issues of value must be cases of objective discussion. Many believe that there are "levels" of evaluation and that some levels are matters of subjective taste as the relativist asserts. For instance, few normative ethicists would be interested in arguing about whether chocolate or vanilla ice cream is the best. What most normative ethicists want to argue is that in matters of *ultimate value* some commitments are more reasonable than others.

For instance, most normative ethicists would argue that there is a huge difference between preference for different ethnic foods and the issue of female circumcision discussed in examples 2-3 and 2-4 above. Many normative ethicists would say that food preference (excluding perhaps cannibalism) is indeed a matter of subjective taste.[5] But whether or not "genital mutilation" is justified or not as a cultural practice is a debatable issue. For a normative ethicist we ought to be able to use our brains, discuss this issue, rise above our own cultural perspectives and decide objectively if such a practice is

[5] Many Americans and Europeans will have trouble though accepting the popularity of eating dog meat in China. Restaurants can be seen in China with cute puppy pictures outside advertising dog dishes served inside.

permissible as simply a cultural variation or a violation of universal human rights and just wrong.

As an illustration that it is possible to reason about values, we can formulate the following where the evaluation of the homosexual lifestyle is part of an argument.

EXAMPLE 2-12

The Bible says that homosexuality is a crime against nature and a crime against God. All crimes against nature are immoral and ought to be prohibited. So, homosexuality is immoral and ought to be prohibited.

Formulated this way, we now have an argument for a focused discussion. Are the premises true? Does the Bible really say this about homosexuality? Even if it does, why should we accept the Bible as authoritative on this issue? Although there do appear to be passages in the Bible that condemn homosexuality (Leviticus 18:22 and 20:13 for the Old Testament, and Romans 1:26-27 in the New Testament), critics of this approach to morality will point out that Leviticus 25:44 appears to approve of slavery in general and Exodus 21:7 appears to approve of the selling of daughters into slavery in particular. Is there such a thing as a crime against nature? What if science is able to demonstrate that sexual orientation is genetically determined, that people are determined at birth to be homosexual or heterosexual, that we have no choice in the matter as with skin color?

Even if the premises are true, do they offer good reasons (in the sense of a valid argument) for the conclusion that homosexuality is immoral and ought to be prohibited? To apply what we have learned thus far about arguments, the focus of discussion should not be on the reasoning of the argument. This argument is valid; if the premises are true, then the conclusion is also true. But the premises are clearly controversial, and most normative ethicists would say that the issues raised in the premises are clearly questions of ultimate value that need some sort of supportive evidence before we have good reasons to accept them.[6]

These premises would need to be conclusions of other arguments. The important point is that there are "bare" unsupported value judgments and value judgments that are part of arguments or explanations. We are interested in recognizing arguments, so that focused discussion is then possible.

Here are some other examples of evaluations that are not yet part of arguments:

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[6] Although the premises are controversial, the arguer apparently thinks the premises are noncontroversial or less controversial than the conclusion. Also, this series of statements is an argument and not an explanation, because the conclusion is not an accepted fact that requires an explanation. Note that a consistent relativist would be committed to saying that the beliefs expressed in this argument are as good as ones that would express more tolerance for alternative life-styles.

EXAMPLE 2-13

I don't like sports. I don't like baseball, basketball, boxing, football, or golf. Every weekend the major TV networks in the United States construct their programming to torture me. No matter what the season there is some sort of "game of the week" that is supposed to be the focus of everyone's attention. And it is getting worse. Now, no matter what the country or time of day, there is some big game or contest that one cannot escape, be it a quiet rural neighborhood in central Kansas, a pub in Great Britain, or a hotel lobby in Japan. Ahhhh!!

EXAMPLE 2-14

As Americans we believe in our (European) cultural heritage, not just because it is "ours," but because it is good. But our ability to preserve and transmit that common heritage depends on the continued existence of a majority population that believes in it.

The first one (2-13) presents no reasons why we should not like sports, so it is not an argument. The second one (2-14) is an interesting case that deserves elaboration. The first statement contains the value judgment, "America's European cultural heritage is good." Out of context, we might interpret the entire statement to contain either an argument (We ought to believe in our cultural heritage, because it is good.) or an explanation (Americans believe in our cultural heritage, because they know it is good.). However, the context from which this passage was quoted indicated that it is best interpreted as a value judgment being used as a premise for a larger argument with a very controversial conclusion.

In the original article, "Immigration: Threat to Our Cultural Heritage," Lawrence Auster[7] attacked the traditional liberal ideology of blind commitment to cultural diversity. He attempted to demonstrate (conclude) that this ideology, which has always been assumed to be an important contributing factor to the goals of democracy is actually "profoundly inimical to freedom" when translated into the contemporary context of unrestricted U.S. immigration of Latin American and Asian people. According to Auster, the natural forces of ethnic and cultural identity, power struggle for self-determination, and the hardship of assimilation into a new and alien culture have produced and are producing a "dangerous impetus toward ethnic chauvinism" and a "manifestation of... adversary culture." He claimed we are finding a "massive assault on Western literature and thought" and a dangerous weakening of commitment to traditional American ideals that restricts freedom to express certain ideas. According to Auster, a "new, unfree America (is) being born of uncontrolled immigration." In other words, because more and more people immigrating to the United States are from Asian and Latin countries and do not share the political and philosophical ideals of European-Western culture, those ideals are not only constantly

[7] Reprinted from ***Newsday*** in the Sunday edition of the ***Honolulu Star Bulletin and Advertiser***, May 19, 1991, B1. See also Auster's "The Path to National Suicide: An Essay on Immigration and Multiculturalism," (American Immigration Control Foundation, 1990).

under attack but are in danger of being overwhelmed in a new atmosphere of intolerance for other cultures and an overzealous protectiveness of one's own. At various universities in the United States, according to Auster, this cultural protectiveness became manifest in the phenomenon of "political correctness," where the ideal of free speech was under attack. In short, our democracy is being slowly destroyed by too much immigration from non-European countries.

This issue is a deeply involved and sensitive one of great importance. It touches on one of the greatest issues of our time, not only for the United States but for the entire world: How to obtain a unity of purpose and commitment to global or national democratic values while different ways of living are brought together as never before in history; how to maintain a sense of unity as a fragile species with a common, contingent evolutionary history and an uncertain future, while celebrating cultural diversity and the need for cultural autonomy; how to reap the benefits while moderating the inevitable frictions produced by cultural differences; how to avoid a destructive "us-vs.-them" attitude when cultural differences are brought together.

Personally, I disagree with Mr. Auster's conclusion that the commitment to cultural diversity is hostile to freedom and destroying America. Living in Hawaii as I do and seeing first hand the positive contribution to society of cultural diversity, I believe that such diversity enhances human potential and the development of our economy, and it strengthens democracy and does not weaken it. Although much too involved to describe in detail here, I can sketch the possible course an argument between myself and Mr. Auster might take. He would be able to get me to agree that completely uncontrolled immigration would hurt the economy -- too many people, too soon, competing for too few jobs would create severe tension. However, I would question what I see as one of his premises. I would argue that Asian and Latin American immigration need not and ought not to be a dismantling of European-Western culture and ideals, or a construction of a philosophical perspective that renders this tradition illegitimate for the twenty-first century. Rather, I would argue that we need a more humble perspective of the importance of the European-Western tradition: not only its political concepts, but particularly its primary products in terms of relating to nature, that of science and technology.

I would argue that this more humble perspective is vital. A greater danger than the frictions produced from cultural diversity, which are most likely only temporary, is the wholesale subversion of cultural differences by some of the peripheral values of Western culture -- the cultural imperialism currently taking place as one culture after another adopts Western economic values and the engines driving these values, science and technology. Perhaps Western-European culture needs a good philosophical slap in the face to recognize its proper place as a most valuable contribution to the human experience, but not one that is exclusive and absolute. There are other valuable traditions besides science and technology, and wherever people have congregated on this planet and formed a society, insightful ways of relating to reality have been discovered.

I would argue that in the long run the advertisements we looked at in Chapter 1, and the daily unprotected onslaught and uncritical acceptance of such advertisements, are much

more dangerous to the health of a society than would be a neighborhood full of families who speak different languages. I would worry more about all of these families buying the same digital video recorder at Sam Kung's, and the children of these families laughing at the "silly" beliefs of their grandparents from the old country. I would worry much more about the implications of government reports that describe the Japanese people as "creatures of an ageless, amoral, manipulative, and controlling culture" conspiring to dominate the world.[8] Or, the mental profiling of all Muslims as terrorists. As President Obama noted in a speech intended to mend relations with the United States and the Islamic world, "I consider it part of my responsibility as president of the United States to fight against negative stereotypes of Islam wherever they appear,"[9]

I might not be able to persuade Mr. Auster to change his mind, but if Mr. Auster and I stayed on track, if we both used reasonable arguments for our positions, if we then identified the nature of our premises -- statements of fact, values, explanations, and such -- we would both learn a lot from each other. We would have an opportunity of learning precisely where we disagree and then be directed to a discussion of methodologies that might be used to resolve disagreements other than logical ones. We might also gain valuable insights into hidden assumptions we did not realize we were making and recognize that some of our premises need a great deal more thought. Anyone following our discussion would likewise benefit from such focus and perhaps be stimulated to suggest ideas or points of view that we had not considered.

My disagreement with Mr. Auster would no doubt involve explanations, values, and beliefs, as well as logical arguments. Life is tough, communication difficult, closure on major philosophical issues most often elusive. But the distinctions we have made thus far in language use at least give us areas of focus and a discipline of thinking that is surely better than pointless shouting, especially if our goal is to test our beliefs.

Meaning and Clarification

Because beliefs consist of statements, and statements consist of words, a little reflection reveals that the task of evaluating an argument and the terms contained in it are linked. In Chapter 1, I asked you to evaluate the claim, "Dunlop's SP-4 radial tire had the highest rating in ***Car and Driver*** tire test." We recognized that the terms *rating* and *test* were **vague**. Vague expressions lack clarity; their meanings are unfocused or fuzzy. To evaluate the claim of this advertisement these terms needed to be defined more precisely. How was the rating done? What were the specifics of the test? And so on. On the other hand, we found that the term *highest* was purposely ambiguous. An **ambiguous** term has

[8] This statement was from a foreword to a CIA report called "Japan: 2000." It was written by M. Richard Rose, president of the Rochester Institute of Technology. Although the inflammatory foreword was later removed from the final report, one wonders if the ideas have been removed from the minds of some U.S. political leaders. The story of this report was a Gannet News Service report reprinted in my daily newspaper (Jennifer Hyman, "Report to CIA: Japanese are amoral beings," ***Honolulu Star-Bulletin***, May 25, 1991, A-1). At about this same time, Edith Cresson, French prime minister, was describing the Japanese as "ants" and "little yellow men" who "sit up all night thinking how to screw us."

[9] June 4, 2009.

two or more distinct meanings in a given context. The advertisers deliberately took advantage of an ambiguity: In this context, *highest* could mean either the *very* highest rating, meaning all other tires rated lower, or the highest category used, meaning that this was only a general category and several other tires could rate placement in this category, some or all rating higher than Dunlop within this category.

In this section we will see that in evaluating arguments and persuasive appeals, we need to pay attention to how arguments are packaged. We need to be "picky" and pay attention to the meaning of the words used and the style of presentation. Otherwise, we can easily be tricked into believing that evidence is presented when it is not, or that evidence is stronger than it really is. Consider this example:

EXAMPLE 2-15

Any intelligent human being living on the brink of the twenty-first century should support a woman's right to abortion. Abortion is not murder; it is simply the prevention of a future person.

The last sentence in this passage shows that we often offer definitions of key terms to provide clarity for our positions and eliminate vagueness and ambiguity. But it also shows that the meanings of terms are linked with beliefs, and definitions are as much in need of critical evaluation as arguments are. It is often appropriate in a discussion to explore a reasoning trail by asking, "What do you mean by X?" where X is a key term within an argument. But we also have to ask if there are good reasons for the offered definition. In 2-15, does the author have a right to define abortion as meaning "the prevention of a future person"? Is this the way the word *abortion is* commonly used? If not, are there good reasons for using the word in such a unique way?

Traditionally, most logic and English books distinguish between denotative and connotative definitions. A **denotative** definition of a term involves pointing to or naming particular objects or instances for which the term applies. This is how we start children toward language acquisition. If we want to teach a child the meaning of the terms *rabbit* and *chair*, we point to examples of these. An amazing process seems to take place during such language acquisition. We point to a few different examples of chairs, and fairly quickly a child "gets it." Even though we show only relatively few of the many different types of chairs, somehow the child grasps the essence of what all chairs are like.

Eventually, the child seems to understand what has been traditionally called a term's **connotative** meaning. Connotative meaning is the package of qualities and attributes intended by use of the term. For this reason connotative meaning is often called **intentional** meaning. When a child understands correctly the use of the word *chair,* he or she understands what is intended when a speaker uses the term, in this case an object for people to sit on that has different types of support. Notice that by merely pointing at different examples of chairs a child could easily be confused about the denotative meaning of *chair.* A child could easily be uncertain as to what we are pointing at. The

examples we use could all be chairs made of wood, or with four legs, or of a particular color. The child must eventually learn that what we intend by the term is more flexible than these particular instances of chairs; that chairs can have different colors, different types of support, and can be made out of many different types of material.

Because we are interested in meaning to obtain clarity, and clarity presupposes agreement on meaning, it is important to see that there are different theories of meaning. Some philosophers, for instance, have denied that denotative definitions really exist or are ever very useful. These philosophers argue that only intentional meaning exists for terms and there never is any absolute, fixed, intended meaning for any term -- that the package of the qualities and attributes intended by the use of a term is a "fuzzy" package, containing one set of qualities and attributes in one situation and a slightly different set in another.

For instance, the word 'snow' will mean something different for someone living in Minnesota and someone living in Singapore. The package of qualities and attributes of Minnesota snow will probably be larger, containing more distinctions and shades of meaning. Thus, some philosophers argue that intentional meaning is always relative to a language-using group -- a culture, subculture, or class of people. This is particularly apparent when we try to understand other cultures by learning the language of that culture.

Suppose I am trying to learn a language where the term *gavagi is* used for what I call *rabbit.* After a few days of exchanging pointing gestures with the members of this culture I conclude incorrectly that I understand what they mean by the term *gavagi.* Little do I realize that in this culture what the members intend by *gavagi is* "sacred, untouchable object that contains the spirit of one of our ancestors." Perhaps for me, *rabbit* means "pesky creature that used to eat grandma's vegetables, but tasted a little like chicken and was good for a barbecue when grandpa killed one for dinner." Clearly, in spite of our consistent pointing gestures the situation is unfortunately ideal for major miscommunication, especially if I ever go hunting with some of the members of this culture. Although we seem to be pointing at the same object (the rabbit), clearly our respective connotative meanings for ‘rabbit’ are very different.

This little excursion into the relativity and flexibility of meaning is important. Most logic and English books claim that types of definitions can be classified and that rules provide "correct" definitions depending on the classification. For instance, **lexical definitions** are considered the essential meaning of a term or the way the word is used by most people. The goal of a dictionary is to provide the lexical definition of terms. Some examples of rules for providing lexical definitions would be: avoid circularity, avoid being too broad or narrow, avoid vagueness and ambiguity, avoid emotional terminology, be affirmative rather than negative, and indicate the context where appropriate. Such definitions are also considered classifiable as true or false. But because there are different theories of meaning, terms such as *correct, true,* and *false* may be too strong and subculturally biased.

Much of life's richness is derived from the deliberate use of fuzzy language. For instance, for someone who regularly watched late-night television in the United States during the late 1980s and early 1990s, the argument "The David Letterman show is better than that of Arsenio Hall, because Arsenio Hall is nothing but a long corridor designed by an Italian architect" might make a lot of sense (as well as being humorous). It implies a whole host of features about both men and their shows -- how they dress, the depth of their personalities, the quality of their guests and entertainment, and the kind of people that watch each show. In logical analysis, our task of being "abbreviators" is not to inhibit, prohibit, or destroy such fun uses of language, or to limit all the creative ways that we use words to carve perspectives out of the silence of existence, any more than it is to ban all emotion from life. Our task is simply to provide clarity. Recognition of the existence of language using groups and the flexibility of meaning will often be part of this task. So, if someone uses a term or a phrase in a unique way as part of an argument, our question is always the same: "Are there good reasons for using the term or phrase in this unique way?"

Another example found in logic and English books is that of **stipulative definitions**. A stipulative definition does not attempt to define a word the way most people use it, but specifies a relatively arbitrary operational meaning to a term, such as when an instructor says, "In my class an A grade will mean a course average of between 88 percent and 100 percent of total points." Such a definition is not totally arbitrary, of course. There may be good reasons why the instructor has chosen 88 percent rather than 90 percent as the low end for an A grade. Based on the instructor's standards for learning, past student performance, difficulty of the material in the class, the predictive value of achieving an A in this class and achieving an A in other classes, and the number of students who achieve A grades relative to the number of students who achieve other grades, the instructor may have decided that 88 percent is more appropriate than the stricter and more traditional 90 percent. But choosing 88 percent rather than 87 percent or 89 percent is probably arbitrary. Some cutoff point is needed, and the instructor has decided that the lower end for an A grade needs to be relaxed a little.

Notice that what we needed in the Dunlop "highest rating" example to properly evaluate the advertising claim was a stipulative definition for the phrase *highest rating.* When we discovered that an excellent or highest rating could be achieved by scoring between 300 and 350 points on the tire test, Dunlop's tire was placed in a different perspective relative to its major competitors, which actually scored higher within this category. By arbitrarily changing the stipulative definition of *highest* we could render the advertisement claim false. Suppose Dunlop's major competitors scored 325 points and above, but Dunlop scored only 310 points. If we arbitrarily changed the stipulative definition of *highest* to mean between 325 and 350 points, Dunlop's tire could no longer be given this rating. It is often the case that a lot of money is riding on stipulative definition decisions.

In the early 1990s, Congress and the Food and Drug Administration (FDA) began to respond to consumer protection group concerns on food package labeling. By this time, food manufacturers had taken advantage of increasingly health-conscious consumers by making liberal use of words such as *light, low,* and *free* (as in reduced fat, low

cholesterol, sugar-free). Without standards and stipulative definitions, these terms could mean just about anything. Thus, by 1993, the FDA issued rules based on a law passed by Congress, such that *free* must mean less than five calories, less than 0.5 grams of sugar, and less than 5 milligrams of cholesterol and 2 grams of saturated fat per serving. *Low* must mean less than 140 milligrams of sodium, less than 40 calories, 20 milligrams or less of cholesterol, and 3 grams or less of fat with 1 gram or less of saturated fat -- each per 100 grams per of food. Without such stipulative definitions, a 1991 Lean Cuisine frozen dinner advertisement was able to claim that Lean Cuisine dinners "skimp on" calories, fat, and sodium. The advertisement claimed that these dinners contained only 1 gram of sodium per entree, but 1 gram is equal to 1,000 milligrams, 860 milligrams higher than what the FDA defined as low![10] A similar situation was repeated in 2003-2004 with the gain in popularity of the Atkins Diet. Advertisements for products appeared hyping the benefits of products due to being “low-carb,” having a certain amount of “net-carbs,” “effective carbs,” “fit-carbs,” or “useable net-carbs.”

Consider another similar problem for the twenty-first century -- genetically modified food. Critics of the biotechnology industry and big food manufacturers claim that such foods are "Frankenstein foods" and want the government to mandate that all foods be labeled as either containing any genetically engineered products or free of such products. Supporters of genetically modified foods claim that many of these products actually help the environment by requiring less pesticides and producing large quantities of food more efficiently. Regardless of who is right about this debate even defining what a genetically modified food is, is not simple and will require a lot of debate before establishing a stipulative definition.

A large percentage of corn and soybeans are now genetically modified and derivatives of these vegetables are mixed to varying degrees in a large number of processed foods. Even with the best intentions it is difficult to make sure that trace amounts of genetically modified corn and soybeans don't get into foods intended as GM pure. Furthermore, all processed foods contain major ingredients mixed with minor additives. What if a small percentage of the additive, itself a very small percentage of the resulting product, was the result of a genetically modified process somewhere down the line in the manufacturing process? What if a manufacturer of cheese uses a genetically modified enzyme to set the cheese or chickens are raised on genetically modified feed. Even though there are no genetically modified ingredients in the final product, how should these foods be classified?

In 2001 the European Union decided that products don't require labeling if each of the ingredients contains 1% bioengineered material or less. Consumer groups wanted a limit one-tenth of 1%. And speaking of vegetables and trace ingredients, are French fries still a vegetable if the vegetable oil they are fried in has some "essence of beef" added for flavoring purposes? Hindu and vegetarian groups sued McDonalds over the issue in 2002.

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[10] See Exercises, part II, number 4, Chapter 5, to see how the Lean Cuisine advertisement is representative of a common informal fallacy.

One would think that we all know what a disease is. But can a disease be "manufactured" in a sense by a drug company for profit? Can the definition of a disease be stretched to the point that people are made to believe an unhealthy condition exists where previously the same condition was considered normal? In September 2000 class action lawsuits were filed in California and New Jersey against the maker for Ritalin, a commonly used drug for "attention-deficit-hyperactivity-disorder" (ADD. The suits alleged that the makers of this drug conspired with psychiatrists to "create" a disease. Critics of the widespread use of Ritalin argued that the drug was vastly over-prescribed for children, many of which were simply normal active but perhaps precocious children that might be more high maintenance for teachers to control than average. The point is that definitions for words such as *disorder*, *treatment*, and *disease*, as in attention-deficit-disorder, treatment, or disease are the result of beliefs that could be the result of bias and not evidence. How should one define 'hyperactivity' in a child that nature has made to be curious, active, and exploratory? As late as 2010, after many decades of use of drugs for ADD, medical scientists were still debating whether there was an objective test for ADD.

Critics of drug companies claim that too often the drug companies are guilty of "disease branding." They attempt to medicalize a range of conditions within which a large percentage is normal. They then take advantage of the insecurity of doctors and their patients. For instance, in 2010 the giant German drug maker Boehringer Ingelheim attempted to get approval of a "female Viagra" drug for low libido in women. The condition was branded as "female sexual dysfunction." Although a real condition for some women, critics argued that a nation wide advertising tour featuring a former Playboy model was surely aimed at having lots of women take this drug, many of which would surely be in the normal range of sexual function for theirs ages.

One would also think that it would be easy to provide a definition for "being a woman." But in an age of routine sex changes, transgendered women, and controversy over whether intersexed children should have "gender management" surgeries, this is not an easy matter and has been the subject of controversy in women's sports (tennis and canoe racing). Should we define who a woman is based on a person's birth certificate? Genetic testing? Anatomy alone?

The point of these examples shows that providing precise definitions is often a matter of great consequence. Sometimes, however, bureaucrats can be overzealous in their concern for precise definitions to protect the public. After the 1989 Exxon Valdez oil spill that destroyed the environment along large sections of Alaska's coastline, well-meaning regulation writers in the Environmental Protection Agency, in implementing the Oil Pollution Act in the early 1990s, defined oil as "anything that causes a film or sheen on water." This subjected any product that fit this definition to new rules on the shipments of hazardous goods, including milk, suntan lotion, and salad oil! The definition was eventually changed, but these examples underscore the point that providing definitions is more than just a philosophical ivory tower game of no consequence to business, industry, and the public.

In the first decade of the twenty-first century, the U.S. government's stipulative definition of "truck" became very controversial and a subject of much debate between the automobile industry and environmental groups. In an attempt to insure energy security and lesson the U.S. dependence on foreign oil, the government mandated a particular level of fuel efficiency in passenger cars and trucks. Because many trucks were used for essential job related activities, the fuel efficiency levels for trucks were much lower than for passenger cars. But by the first decade of the twenty-first century the most popular selling (and profitable for automobile manufacturers) cars were SUVs, which were classified as "light trucks," and subject to lower standards of fuel efficiency. Hence, fuel consumption increased 7% in the 1990s in spite of major advances in engine performance. Environmental groups wanted the definition changed to exclude SUVs. Most automobile manufacturers resisted any change.

Consider some other famous definition problems. Former president Clinton was asked in court under oath if he had ever had "sexual relations" with Monica Lewinsky, a White House intern. The definition he was given of sexual relations did not include oral sex, so he answered "no." Did he lie? His presidency may have been saved by a poor lexical definition of sexual relations. About the same time a national survey on teenage attitudes on sex revealed that many teens did not consider anal sex as sexual intercourse. This was an alarming revelation for public health officials concerned about the spread of AIDS. Presumably teens who had been warned about AIDS and unprotected sexual intercourse would think that they had found a way around the danger.

After the 9/11 World Trade Center attack the Bush administration decided to declare war on terrorism. But how to define *terrorism* was no small problem. To give but one example, the United States needed Pakistan as an ally to help with the war in Afghanistan. But Pakistan was supporting groups in Kashmir that were viewed as freedom fighters for the liberation of Kashmir. India, controlling disputed parts of Kashmir, deemed these groups as terrorists. In a famous speech, the president consequently defined terrorist organizations as those with a "global reach." Most people in the United States agreed with a conservative Republican Senator, who said, "We don't need to quibble about a definition of terrorism. We know it when we see it."

Note that the Senator was saying that a denotative definition is easy. We can simply "point" to 9/11 and the involvement of Al Qaeda. But how could the President or the Senator define terrorism connotatively that excluded the actions of the United States itself as terrorist? At the time the FBI defined terrorism as "the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives." Applying that definition to the actions of the United States in Nicaragua in the 1980s would classify the CIA and the Nicaraguan "Contras" as terrorists rather than "freedom fighters" (President Reagan's characterization of the Contras). The CIA "harbored," recruited, armed and trained the Contras, in order to "coerce" and overthrow a government, and terrorize a people, through violent means ("in furtherance of political [and] social objectives"). U.S. intervention went well beyond "harboring" in 1984, when the CIA mined three Nicaraguan harbors. When Nicaragua took this action to the World

Court, an $18 billion judgment was brought against the U.S. The U.S. response was to simply refuse to acknowledge the Court's jurisdiction.

Abortion discussions and decisions have involved a stipulative definition for the phrase "legal abortion." Because brain activity in the fetus can be detected after the first three months of pregnancy, many supporters of abortion have advocated that legal abortion should mean "within the first trimester," within the first three months of pregnancy. When these supporters say that women should have the constitutional right to legal abortion, they do not mean at any time during pregnancy. For these supporters of legal abortion, given that the mother is healthy and that the fetus is developing normally, there is a legal and moral difference between an abortion within the first trimester and one at eight and one-half months that terminates the fetus's development, just as there would be a legal and moral difference between an abortion within the first trimester and the discarding of a newborn baby in a trash can. Proponents have argued that even though three months is relatively arbitrary, there are good reasons for choosing a cutoff point around this time: That given the general right of a woman to control her own body and the general uncertainty of when life begins, and the physiological knowledge that brain waves can be detected in a fetus after the first trimester, three months is argued to be a reasonable legal and moral cutoff point.

Those who oppose abortion, of course, object to giving any meaning to the phrase "legal abortion" by claiming that life begins at conception. This claim of a true lexical definition of life, if widely accepted, would have huge implications in potentially restricting cures for many diseases. Advocates of therapeutic cloning argue that the blastocyst stage of the development of an embryo is just a bunch of undifferentiated "stem" cells and not a human being. There is no body shape, no brain, heart, etc. Potentially, however, these stems cells could become hearts, livers, kidneys, spinal cords, nerve cells, and so on, to be used for transplants without rejection and save thousands of live a year. So, a lexical definition for human life here is extremely important and will involve a full range of our beliefs.

The important point about providing definitions is that even if we need to acknowledge the appropriateness of allowing for a great deal of flexibility in providing meanings for terms, we can still recognize the need for some flexible rules of thumb that highlight examples of unfairness in the use of words. For instance, the old television sitcom "All in the Family" showed a scene in which the star, Archie Bunker, a rather narrowly cultured man in his fifties who had only a sixth-grade education, was sitting at his kitchen table allegedly studying for a history test as part of his attempt to finally get his high school diploma. Rather than studying for the test, however, he was actually practicing a cheating technique that he planned to use. He was wearing a long-sleeved shirt, and under one sleeve was a roll of paper with key terms and dates on it. He was practicing to see if he could slyly slide the paper out without it being seen. When his daughter, Gloria, walked by and saw what he was doing, the conversation went like this:

EXAMPLE 2-16

Gloria: "Daddy, are you going to use those notes on your exam?"

Archie: "I certainly am, little girl."

Gloria: "But Daddy, that's cheating!"

Archie: "It certainly is not, little girl. Cheating is when you are supposed to give something to someone and you don't. I'm supposed to give them the right answers, so I'm going to give them the right answers."

Gloria: "But, Daddy, you're not being honest!"

Archie: "I certainly am, little girl. I asked myself an honest question, `Could you pass this test without these notes?' And I gave myself an honest answer, `No you could not.'"

Clearly, Archie is not being fair in his use of the words *cheating* and *honesty.* His argument is a classic example of what logicians call **equivocation**, the inconsistent use of a word or phrase. Equivocations are often deliberately used to create humorous situations, as in old movie comedies when a butler tells the comedy star to "Walk this way," and the comedian proceeds to imitate the way the butler is walking rather than just follow him. But when we argue, and a word or phrase occurs in both a premise and the conclusion, the reasoning trail will not be valid if the words are used inconsistently. An illusion of evidence will be created, but with no evidence actually supplied by the premise. Clearly, Archie has not provided a good case for being honest in the way Gloria is using the term.[11]

Does the use of the word *intelligent* in example 2-15 add anything to the logical support of the abortion argument? Is it fair? When people argue, they want to be as persuasive as possible. They therefore choose words that "color" their positions in the most favorable light possible. But such coloring is not necessarily evidence. Consider this example:

EXAMPLE 2-17

Congress should support the president's request for the Peacekeeper missile. Our freedom, and the peace and freedom of the entire world for that matter, depends upon a strong military defense system.

What is a Peacekeeper missile? During the early 1980s, President Reagan wanted a reluctant Congress to fund his plan for building the MX nuclear missile. For its time, this

[11] For practice, can you formalize in terms of premises and conclusion Archie's argument? Hint: Archie's defense can be reconstructed into two arguments with one conclusion being that he is not cheating and the other that he is being honest.

would be an awesome weapon. It would be mobile, making it hard for an enemy to destroy before it was launched. It would be very accurate, enabling detonation of a nuclear bomb precisely over the location of an enemy's nuclear missiles. Also, each warhead of an individual MX missile would carry as many as fourteen nuclear bombs, such that once the missile was launched over enemy territory, the warhead would come apart and be able to independently target fourteen different military sites or cities. It would also cost tens of billions of dollars to construct, taking that much more money away from investment in economic development, education, and health care.

For critics of the MX missile, its construction also implied a radical and dangerous change in our nuclear defense policy. Our previous policy was called "MAD," an acronym for "Mutually Assured Destruction." As the name implies, by building up a redundant nuclear force that would enable us to destroy the major cities of a whole country many times over, our policy was to create a situation where it would be crazy for anyone to ever attack us. At one time, for instance, thirty-six nuclear bombs were targeted on Moscow, even though only one was needed to destroy the city and kill millions of people, and just one of our modern submarines (the Trident) could launch enough missiles to destroy more than 100 cities. With this policy, we aimed our bombs at people, hoping that no sane leader would ever want all his or her people dead. This policy partly reflected the inaccuracy of pre-1980 missile guidance systems; a city is a relatively big place, and bombs don't have to hit it in the middle to destroy much of the city.

However, to hit reinforced concrete missile launching sites located underground, accuracy is very important. So, if we have an accurate missile that can knock out the enemy's missiles, why not aim our terrible weapons at other terrible weapons rather than at innocent people? The problem, according to Reagan critics, was the new strategy and psychology implied in this plan. From the other side's point of view, the MX missile was a "first-strike" weapon -- it could destroy an enemy's missiles before they could be launched -- implying that the country with such an offensive missile would then not only be interested in defending itself by ensuring nuclear war would never happen, but in winning a nuclear war as well. If you were on the other side and you knew that your enemy could now destroy the only means that you had of defending yourself, you would be more paranoid and the constraints that you had developed for not launching your own weapons would be lessened. In short, in an apparently dangerous situation you would be more "trigger happy," more likely to think "use them or lose them," to launch your weapons before they were destroyed by accurate incoming missiles. Those opposed to the Reagan plan argued that we would be spending billions of dollars to recklessly increase the danger of nuclear war, not lessen it. Supporters of Reagan argued that it not only made more sense to target weapons rather than people, but in the long run the Soviet Union would not be able to compete economically with the United States buildup of weapons.

Given this controversy, the Reagan administration made sure that all public discussions, speeches, and correspondence by administration officials used the term *Peacekeeper* rather than *MX missile.* What this example shows is that we can distinguish between the *cognitive* or descriptive meaning of a term and the *emotive* meaning or positive coloring

added to a term. It is surely a more positive thought to think of peace than the detonation of a nuclear missile, but coloring the MX missile in this way did not offer evidence that its construction would bring about a more peaceful and secure world. For critics of the Reagan plan, the MX missile was not a weapon of defense and peace, but an expensive offensive weapon of war that would actually make war more likely, reduce economic investment and competitiveness, and produce fewer jobs and more homeless people. These critics may have been wrong, but coloring the debate with the word *Peacekeeper* was not evidence against the critics.[12]

Because politics is the art of persuasion, politicians and their speechwriters spend a considerable amount of time emotively coloring their positions in the most positive light possible. The Reagan administration referred to the Nicaraguan Contras as "freedom fighters," but to those Nicaraguans who defended the Sandinista government these Contras were often seen as "terrorists" who sometimes pillaged farms for food, raped women, killed innocent men, women, and children, and received illegal and immoral aid from the United States' CIA, which was interfering in the affairs of a sovereign country.

When the Reagan plan to spend trillions of dollars on building a laser weapon system in space became controversial -- not only because of its great cost ($6 billion per year) but also because of its questionable workability -- the administration emphasized that its proposal was called the "Strategic Defense Initiative," and not "Star Wars" as used by critics. "Defense" sounds much more positive than "Wars." By the time of the Clinton administration, although the former Soviet Union was no longer our nuclear adversary, $3 billion was still being spent annually on the project, the name had been changed to Ballistic Missile Defense, and the program became part of a policy called Theater Missile Defense.[13] With the George W. Bush presidency funding increased to $10 billion a year by 2004, and part of the program was called "Theater High-Altitude Area Defense." Critics still referred to the effort as Star Wars and claimed that the system would not work and that chemical and biological terrorism were far greater threats. This amount of money was twice the amount spent on customs and border patrol by the Department of Homeland Security.

Speaking of the Bush administration, in one of President George W. Bush's state of the union speeches he called his new-forest initiative the "healthy forest initiative." But

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[12] After billions of dollars had already been spent on research and development, the MX missile project was finally discontinued by President Bush and the U.S. Senate in September 1991. A year later the United States agreed to dismantle, also at great cost, those missiles already built. But the United States built and deployed 14 Trident II submarines. Just one contained enough missiles and nuclear bombs to blow up about 200 cities. By 2010, the United States was in the process of building a new class of nuclear submarine at a cost of about $8 billion each. Critics wondered how these would protect against terrorists living in caves.

[13] Incidentally, our Department of Defense used to be called the "Department of War." In my state, our prison used to be called "Oahu Prison." After years of controversy on prison conditions and the embarrassing fact that three-fourths of the prisoners are of Hawaiian ancestry, it is now called the "Oahu Community Correctional Facility." In China, prisons are called "labor reform departments." Prisoners, some of them members of the pro-democracy movement, are forced to labor with no retirement benefits and no union negotiations, for an export economy for products sold to Japan, Germany, and the United States.

many environmental groups claimed it would give a blank check to logging interests to log our national forests. (There would no longer be public hearings on the decisions the government makes about the national forests.) He called his proposal for a new type of fuel-efficient car the "freedom car." But this program was already started by former President Clinton and Bush's new tax plan gave very generous tax breaks to any business that bought a big SUV.

The point is, does such emotive coloring add anything to the clarity of the debates on these issues? Because positive coloring does not necessarily add any positive evidence, you should be on guard to separate the two.

The example on the building of a weapon system in space also shows that sometimes it is in a politician's best interest to "neutralize" emotionally charged and controversial issues, to disguise negative features with a bland coloring or with what are called **bureaucratic euphemisms**. Consider these examples:

EXAMPLE 2-18

The United States demonstrated its military and moral superiority during the 1990 Persian Gulf War. Our surgical strikes and smart weapons overwhelmed Iraqi forces while keeping collateral damage to a minimum and our own loses were mostly from friendly fire.

EXAMPLE 2-19

The president has fulfilled his campaign promise to the American people. With the exception of a few items of revenue enhancement, there have been no new tax increases. And this policy has worked. With the exception of a significant, but temporary, downturn in the economy we have avoided a serious recession.

The front-line experience of war is a terrible thing. Firsthand experience of death and bodily mutilation forces us to acknowledge our own fragility and eventual death, and often at an even deeper level, confront the great puzzling issues of the meaning of life and death. It is not easy to get the black-and-white support needed to fight a war efficiently if people are emotionally confused and terrified. So our politicians and military commanders are trained to use bland phrases such as "collateral damage" to neutralize the fact that in any war significant numbers of innocent people will be killed who unfortunately lived in areas next to (lateral to) bomb sites. It also helps support the voter’s moral self-image to think that these people were killed as the result of a "surgical" process, implying that military personnel were doing the best they could not to kill them, even though they knew they would probably kill some anyway. The politicians and military commanders also don't want to engender emotional confusion by describing the accidental killing and maiming of our own people by their own "smart" weapons,

weapons with one-track robot minds programmed to smash only targets, any targets. So, they say our people experienced "friendly fire."

It is also hard to maintain clarity of resolve for goals unless a simple "us-versus-them" attitude is maintained. So, in the case of the Persian Gulf War, the United States government attempted to neutralize the fact that its forces killed approximately one hundred thousand Iraqi soldiers, mostly simple farm boys who didn't want to fight anyone, and that many were killed "surgically" in a "turkey shoot" on a Basra road attempting to return to their families.[14]

The world may be an evil place sometimes, and difficult paths may need to be followed that are often only the lesser of evil paths. A strong military and the U.S. action against Iraq and Afghanistan after 9/11 may be examples of these lesser evils, but bland coloring with bureaucratic euphemisms does not add to the evidence for the choices the United States made. Also, emotionally appealing references to “freedom is not free” and the need to defend the “homeland” against “evil doers,” or vague statements “I am against terrorism and plan to defend America," do not provide the necessary clarity and evidence that the United States made the right choices to defend its homeland and freedom from terrorism for the rest of the world. For instance, critics of the war with Iraq after 9/11 did not question the basic premise that we have to fight terrorism abroad and seek out and destroy terrorists before they hurt people in the United States and the rest of the world. They claimed that the issue was whether the war with Iraq was a fight against terrorism and the real threat or was it a serious diversion from that war in terms of resources and world-wide prestige and cooperation needed to fight bin Laden and Al Qaeda?

In heated matters such as this, people will disagree whether the expressions they use are emotional coloring, bland euphemistic de-coloring, or attempts at being objective. Some people will protest vociferously when newspaper articles describe what they view as “Muslim terrorists” as “hostage-takers,” “rebels,” “separatists,” or “militants.” Shouldn’t a sentence that states, “The Chechen separatists began firing into the backs of fleeing children,” be better described as “The Chechen terrorists murdered the fleeing defenseless children by shooting them in the back”? On the other hand, those supporting the cause of the “Chechen separatists” often refer to them as “holy warriors.”

The favorable coloring of economic conditions and the actions used to deal with them is also high on the list of political strategies. Politicians do not get elected by promising taxes and economic hardships. Walter Mondale was clobbered by Reagan in the 1984 U.S. presidential election after candidly telling the voters that raising taxes would be necessary to reduce the government's enormous deficit that otherwise must be paid by future generations. George Bush learned this lesson well by dramatically stating repeatedly during the 1988 presidential elections, "Read my lips, no new taxes." When by

[14] Only 7 percent of the bombs used in the first Iraq war were so-called smart bombs, even though militarily screened and censored media reports left the impression that all were. There are estimates that as many as fifty thousand Iraqi civilians were killed, mostly women and children. By December 1991, more than a year after the spectacular media coverage, a Pentagon report admitted that one-fourth of all United States casualties died from "friendly fire."

1990 taxes had been raised on numerous items that affected the entire population, the Bush administration was careful to refer to these increases as "revenue enhancements." (See example 2-19 above.) During this same period of time, when the country seemed to be in a recession -- when economic indicators on employment and business activity based on traditional stipulative definitions of the term *recession* seemed to have been reached -- administrative officials were careful not to use the "R-word" and instead referred to a "significant downturn" in the economy.

These examples are not meant to imply that we know that the economic and military policies of political leaders are always suspect. But their policies are always controversial, and clarity of debate is achievable only if we get to the real issues, only if we are sensitive to the words used and can peel away the surface dazzle of positive coloring or the obscuring screens of neutralized coloring and understand the positions of both sides of an issue before we judge them. For more examples of bureaucratic euphemisms, here are some famous cases: "termination with prejudice" (CIA reference to killing someone); "health alteration squad" (also used by the CIA, in this case to refer to an assassination team[15]); "enhanced radiation device" (US. military reference to a new type of nuclear bomb, a neutron bomb that would kill more people, but would not be as destructive to physical facilities).

While we are on this subject, note how lawyers sometimes create a favorable perspective for their clients. In August of 1991, the news media began covering a story of the Fort Lauderdale wife of a Broward County sheriff. She had been arrested for prostitution and having sex with more than fifty different men, many of them prominent figures in the surrounding communities. However, her lawyer argued that because she was a nymphomaniac and her husband was impotent, her action was not prostitution but "sexual surrogacy." Lawyers also help defend medical practitioners against suits with euphemisms for death. When an anesthesiologist made a mistake and a patient died, a report of the event referred to a "substantive negative outcome" for the patient. Other doublespeak phrases sometimes used are: "therapeutic misadventure," "diagnostic misadventure," and "negative patient-care outcome." And let's hope that if you need an operation your doctor will not need to write on your chart, "Failed to fulfill his wellness potential."[16]

Governments throughout the world make use of bureaucratic euphemisms. In China by 2010 many poor migrants from the impoverished country were flocking to China's major cities to participate in a roaring economy. Most often they lived in special low-income neighborhoods. When the local residents began to feel threatened, the government gated and locked in the migrants at night. The Chinese government referred to the treatment as

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[15] In the 1970s during the Carter administration, after a great deal of controversy over the meaning of such terminology, the CIA was banned by law from engaging in any covert activity that would involve killing foreign leaders. After the 9/11 World Trade Center attack, the Bush administration rescinded the ban.

[16] For more examples of euphemistic doublespeak see William Lutz, ***Doublespeak: From "Revenue Enhancement" to "Terminal Living": How Government, Business, Advertisers, and Others Use Language*** (New York: Harper & Row, 1989). And, The ***New Doublespeak: Why No One Knows What Anyone's Saying Anymore***, William Lutz (New York: HarperCollins, 1997); ***Doublespeak Defined: Cut Through the Bull**** and Get the Point***, William Lutz (Harper Resource, 1999).

“sealed management.” However, perhaps the academy award for an unjust euphemism should go to the Japanese government and its description of the use of young Korean girls as sexual slaves to "service" Japanese troops during World War II as "comfort women." During the Japanese occupation of much of Southeast Asia, as many as two hundred thousand young Korean girls were taken from their families. The girls were as young as eleven, and the Japanese purportedly preferred young, intelligent girls who did well in school. In harsh jungle conditions each was made to sexually satisfy sometimes as many as sixty men per day at special "comfort stations." More than 90 percent of these young women died, and those who eventually were able to return to their homes were most often then rejected by their families and lived the rest of their lives as outcasts.

In terms of the treatment of women throughout history, it is worth noting that no criminal law against male infidelity even existed until an 1810 French law, and this law only prohibited a married man from keeping a concubine in his house against his wife's wishes. Women have been killed, shamed, tortured, branded (literally tattooed by a husband to indicate a date of intercourse to ensure the paternity of his offspring), circumcised (female circumcision -- a euphemism for removal of the clitoris or most of the external female genitalia to reduce female interest in the possibility of extramarital sex), and infibulated (the barbaric sewing up of a woman's labia majora nearly shut, so as to make intercourse impossible) -- all in the purpose of fidelity to men.[17]

The example of comfort women should help you realize that being logical and emotional are not necessarily inconsistent human traits. That sometimes the rational thing to do is to be outraged over issues of great concern to us. Emotions do not always intrude upon the reasoning process. Feelings can act consistently with our reasoning skills and often help guide them.[18] Compare the statements: "The Japanese government used comfort women and stations during World War II to boost the morale of its soldiers" and "The Japanese government participated in institutional gang rape of children during World War II." Which statement is the fairest, the most accurate, the most rational? How should one have reacted to statements regarding "ethnic cleansing" -- the murder of men, women, and children of a rival religion or ethnic identity during the early 1990s war in Bosnia? It would not have been illogical to react with moral indignation and outrage.

However, these examples should be sufficient to make you realize that the use of words is not a neutral activity in arguments, that a great deal of bias, slanting, and unfairness occur in the use of language and can interfere with objectively following a reasoning trail. Even an apparently straightforward descriptive statement can contain an entirely slanted worldview. Consider this statement: "In the future, technology will be advanced to the

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[17] For these and other examples of cultural double standards in extramarital sex see Jared Diamond, ***The Third Chimpanzee: the Evolution and the Future of the Human Animal*** (New York: Harper Collins, 1992), 85-98.

[18] For recent scientific evidence supporting the claim that emotion and reason often work together in rational human beings, see Antonio R. Damasio, ***Descartes' Error: Emotion, Reason, and the Human Brain*** (New York: Grossett-Putnam, 1994). Descartes is the author of the famous statement, "I think, therefore I am." Damasio presents neurological evidence that we should replace this statement with "I think and feel, therefore I am." People who have damage to areas of the brain that affect their ability to produce emotions also lose the ability to make rational decisions.

point that astronauts will be able to take their wives and children with them on long space voyages." Do you see the not-so-hidden stereotyping? In the future won't some astronauts be women?

Before we leave this section, note one more common hurdle to the task of understanding prior to judging -- the use of a jargon style. Here is a typical example:

EXAMPLE 2-20

The belief in an ontologically homogenous relation between statements about UFOs and extraterrestrial life is not evidentially probative. No one who takes the scientific evidence seriously should believe that we have been visited by intelligent extraterrestrials.

The use of such language is often a deliberate act of positive coloring in the sense that we are supposed to be left with the impression that anyone who can use such impressive language must know what they are talking about. We are so overwhelmed that we forget that we must understand the argument and its statements before we judge them. The first statement in 2-20 says only that the evidence linking statements about UFO sightings and real ETs is weak. So, all this argument amounts to is the claim that we should not believe that we have been visited by ETs because the evidence that we have is weak. Thus, rather than just accepting this argument because it is packaged in such an impressive style, the appropriate question to ask, and the appropriate reasoning trail to follow, would be to determine the nature of this "weak" evidence. The evidence might not be "evidentially probative," but the use of such an imposing phrase does not tell us much.

Later in this book we will learn how to use the techniques of formal symbolic logic to "straighten out" and clarify torturous statements. For instance, interpret this statement: "If it is not true that marijuana is not widely used or as harmful as alcohol, then we should follow the example of the state of Alaska and decriminalize its use." Although with a little thought you should be able to do this now, later we will see how to clarify this statement mechanically to mean, "If marijuana is widely used, but not as harmful as alcohol, then we should follow the example of the state of Alaska and decriminalize its use."[19]

Here are some more examples that we will learn how to mechanically translate into a simpler style. Can you restate what these sentences are saying in a simpler style?

EXAMPLE 2-21

"I went into the meeting not believing it would be illegal not to tell Congress the truth." Oliver North's answer to lawyer's question at his trial for his Iran-Contra role.

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[19] Notice that in a full discussion of this issue, the term 'decriminalization' would need to be defined. In Alaska a stipulative definition was used, such that residents were allowed to legally have up to 4 ounces of marijuana for personal use.

EXAMPLE 2-22

It is not true that you can pass the final and not pass the course.

EXAMPLE 2-23

Only if we don't make the car payment this month will we have enough money for both the medical bills and basic necessities.

EXAMPLE 2-24

The view of the arbitration board that the fine against Johnson was justified but the suspension from the team was not is mistaken.

EXAMPLE 2-25

It is not true that not being in the neighborhood on the night of the crime is a sufficient condition for not having knowledge of the crime.

What is Truth?

Up to this point in our discussion of meaning and reasoning we have been using the word *true* as if it were clear and uncontroversial what we were talking about. But obviously the fact that people disagree so often indicates widespread disagreement not only about what is true, but even over a definition of truth, over a conception of what it is, so we can know when we have it.

This section will be a little difficult, but in the interest of honesty and completeness we need to talk about truth. You may require a lot of guidance in this section from your instructor, but keep in mind that some things you read are difficult because life is difficult, and you should not expect to understand everything you read immediately. Many writings on philosophical topics need to be read and reread, discussed, and contemplated as part of an ongoing process. Just as we do not live in a black-and-white world, we do not always find closure, agreement, or complete understanding on every topic even after a lot of thought and discussion. In teaching philosophy, the goal often is not just the understanding of various answers to a big question, but an understanding of the significance of the question. Understanding the significance of a question can be just as valuable as having answers, because once the importance of a question is grasped a whole new perspective opens up. And from that point on, new ideas and experiences are possible. Philosophers disagree on what truth is, but by the end of this section you should

understand (although controversial) how the term is used in this book, and see the relevance of this question for the major issues of our time.

First, a little history. The ancient Greek philosopher Plato (427-347 B.C.) was very concerned about how often people disagree and the negative implications this had for political harmony and the good life. With this in mind, he felt that the only statements that deserved the name *true* would be *self-evident* truths -- beliefs that just by thinking about them convey an absolute assurance that they are true and that any alternatives are false. For Plato, the statement "There are nine planets in our solar system" would not be considered true in this sense. We could be wrong about this now -- we could discover a tenth planet tomorrow -- or something could change such that the belief was no longer true in the future. One of the nine planets could be destroyed by some cosmic catastrophe.[20] For Plato a truth that we could doubt, or was only partially true, or was only temporary did not make any sense. Truth was a definitive notion. It was a categorical notion; a statement was really true or it was not. For Plato, we could not say we had knowledge about anything unless we were *certain* about what we thought we knew. So, for Plato only statements such as "2 + 2 = 4" and "There are no round squares" would qualify as really true. We just know these statements are true by thinking about them; it is self-evident that 2 + 2 equaling 5 and a round square are impossible.
For Plato, another example of a self-evident truth would be "The shortest distance between two points is a straight line." Plato believed that we may learn about such self-evident statements from our experience, but once we do, we seem to have an insight into an "essence" that will be durable beyond anyone's experience and any human lifetime. Unlike the planet example, no future experience by any member of the human race, according to Plato, could show that 2 + 2 is not 4. If we all die, or even if the human race had never existed, Plato argued, the shortest distance between two points would still be a straight line and 2 + 2 would still be 4. These would still be objective truths, whether or not there are any subjective human beings around.

Ever since Plato proposed this conception of truth, Western philosophers have had to grapple with whether there really are such self-evident truths common to all people and cultures, and whether, even if there are self-evident truths, there can be any about those things that are really important to us. Can there be any self-evident truths about what we should value in life, what we should believe about the meaning of our existence, whether God exists or not, and so on? Because of Plato's great influence, many Western philosophers have spent a lot of time attempting to derive important beliefs about values and meaning in life from alleged self-evident beliefs.[21]

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[20] If Plato were alive today he might cite as evidence the fact that during his own time there was widespread agreement that only five planets existed other than the Earth. Thus, he would argue widespread agreement over statements such as this one does not guarantee truth. Something more is needed. Plus today there is intense debate over whether Pluto is a planet or should instead be classified as a dwarf planet. The majority of astronomers voted for a new definition of 'planet' at a meeting of the International Astronomical Union (IAU) in Prague, in the Czech Republic in August 2006. The new definition excluded Pluto as a true planet, but the change was and is controversial.

[21] We can see the influence of this attempt in the U.S. Declaration of Independence: "We hold these truths to be self-evident. . . ."

Some contemporary philosophers see this attempt as futile and actually quite biased. A philosopher starts out as part of a particular culture, searching for self-evident beliefs that will justify all the important beliefs that people of this culture accept. After constructing an elaborate philosophical system that serves as a foundation for this culture, small wonder that the process is judged a success. But the next generation of philosophers, or those from another tradition, easily spot the transparent ethnocentrism of this alleged success, and then proceed to construct their own grand system. All of this would be relatively harmless if these philosophers had not been influential. Unfortunately, most of these philosophers have been reckoned "great" philosophers by key members of their culture, and, according to modern critics, their systems have been used as powerful rationalizing justifications for the actions of the kings, queens, and political shakers of history. It is easy to go to war, and establish inflexible institutions to enforce a conception of normalcy and justice, if you firmly believe that your way of life is based on a self-evident, essential foundation.

Philosophers who call themselves modern **realists** offer another view of truth. These philosophers have been influenced by the success of science in Western culture. The success of science makes it easy to believe in the existence of an objective physical world that we learn more and more about through the ages. Therefore, these philosophers offer what is called a **correspondence theory of truth**. According to this view, beliefs are true if we have a reasonable basis for believing that the terms used in our beliefs correspond at least approximately to real things in the objective world. So, when we say "There are nine planets in our solar system" or "The Earth is spherical" we point to the reasonable evidence that these beliefs are true. When realists are asked how we can define "reasonable evidence" they usually point to the methods of science and say that these methods guarantee that over time our beliefs will correspond more and more to the real world.

Unlike Plato, most modern realists claim to be **fallibilists**. They believe that not only is no belief self-evident, but also any belief could be wrong (fallible). The methods of science ultimately are founded upon **empirical evidence**. We must use our experience of the world to justify our beliefs, and because our experience is never complete, even our best established beliefs could be wrong. If we keep observing Jupiter as the largest planet when we investigate our solar system, then it is reasonable to believe that it really is the largest planet. Furthermore, the realists argue, even though we could be wrong, our best established beliefs must be at least close to the real truth, they must reflect at least in some partial way an actual reality, otherwise it would be a miracle that our beliefs worked at all. Even if we discover some day that there is a larger planet than Jupiter (unlikely), it will still be true that Jupiter is larger than the other known planets today. Realists consider their theory simply a commonsense theory of truth.

One of the major problems with this alleged commonsense view of truth, however, is that we have many important beliefs, such as our value judgments, which contain parts of sentences that do not seem to correspond to anything physical. In the sentence, "George W. Bush is a good president," what does the term 'good' correspond to? In 2004 during the presidential race, political polls showed that the United States people were evenly

divided on whether Bush was a “good” president. In fact, the country was polarized sharply. What could anyone “point to” to resolve such an issue objectively?

The difficulty of answering this question has led philosophers to either postulate some sort of mystical, nonphysical reality in which objects like good "hang out,"[22] or, for those philosophers who fancy themselves more down to earth, to reject values altogether as involving anything entitled to the name *objective*. Thus, the mystic philosophers have the problem of justifying to the rest of us some sort of hidden, nonphysical reality beyond the commonsense world we experience every day, and the down-to-earth philosophers must relegate some of our most important beliefs to statements about a secondary, subjective illusory reality.

Other criticisms of realism are: (1) How can we ever obtain a kind of "above-it-all," godlike view to see whether our beliefs indeed correspond to an objective reality? How could we ever somehow get outside of our minds and cultures and somehow look "down" from an above-it-all perspective at some divide and see whether our beliefs on one side correspond to reality on the other? Won't we always, so to speak, take our beliefs, minds, and cultures wherever we go? (2) As a symptom of this problem, the methods of science and the resulting beliefs seem culturally influenced. Different cultures at different times seem to have had different conceptions of what 'scientific' meant, and this in turn produced different beliefs about what we should accept as true about the world. At one time it was thought sufficient to justify the claim that the Earth was spherical, because a circle was thought to be the most perfect mathematical object created by God. It was thought that if reality is of divine origin, then it would be simple and elegant, and a circle is much simpler to work with than some other geometric shape. Today, such a claim would not be considered scientific; some sort of observational evidence would be needed, such as pictures from space. Shortly after Newton's theory of gravity became well established (the early eighteenth century), most scientists of this time credited only beliefs that contained observable entities as scientific. So, a belief that contained the word *atom* would not be considered scientific. Today, scientists theorize about a whole host of unobservable entities, including atoms, subatomic particles, quarks, and mathematical "strings" in many spatial dimensions.

For these reasons, some contemporary philosophers, who think of themselves as part of a "postmodern" philosophical movement, believe that both Plato's quest and that of the realist are not only futile but in fact have caused terrible harm. They argue that there is little difference in citing a divine or self-evident right to impose one's views and way of life on others and doing so by citing so-called objective evidence that one's views are the most reasonable. Narrow ways of life, self-serving power definitions of normalcy, inflexible institutions, and cultural imperialism are the result in either case. These philosophers argue that if you believe you are really right about something, either in the sense of certainty or objective evidence, then any kind of action becomes possible to

[22] Although not a realist in the modern sense, Plato, for instance, believed in a nonphysical reality in which self-evident thoughts and concepts existed. Our thoughts about good would be true if they corresponded to concepts in this realm. Plato also ended up believing that the physical world was not even real; that it was only a kind of "shadow" of this other realm.

impose those beliefs you believe are right. The solution, then, is to eliminate once and for all notions of truth in terms of "really right." In other words, the most honest and humane approach is to eliminate all notions of truth as objective!

In its place these philosophers offer a pragmatic, consensus, or **coherence theory of truth**. These philosophers recognize only beliefs that people have and that these beliefs can only be justified by other beliefs that people have. Situations never exist where a belief can be checked directly with a so-called objective world. There are only situations where one belief is checked against other beliefs to see if they are consistent with each other. If we believe that the Earth is spherical, and we offer as evidence space shuttle astronauts who look out the window of their spacecraft and take video pictures for the evening news that show a spherical Earth, we are not showing a real physical spherical Earth that corresponds to the belief that the Earth is spherical. Instead, we are comparing one belief with many others. We are comparing the belief that the Earth is spherical with the beliefs: (1) From this vantage point in space under the condition of being in the shuttle, the Earth "appears" spherical; (2) This appearance is reliable because we believe that our video cameras are reliable, that our beliefs about how reflected light works in outer space are reliable and nothing "funny," such as distorting optical effects, happens to light in space; (3) These beliefs are reliable because they are consistent with other shuttle pictures, pictures taken with different cameras by astronauts who went to the Moon, and pictures from other spacecraft, such as the Voyager spacecraft that went to the outer planets, and the Galileo and the Cassini spacecraft that flew by the Earth twice on their ways to the planets Jupiter and Saturn.

For these philosophers, our perspective is still a human perspective; we are not outside of our minds and beliefs when we take and interpret these pictures. And no matter how many particular beliefs of appearance are consistent with our general belief that the Earth is spherical, we are assuming (another belief) that nothing about the way light rays operate in space would distort these pictures.

There has not always been a consensus on this belief about light rays in space. Prior to the sixteenth century, most astronomers believed that light rays and perceptions based on them would be altered in space. They believed that reality was divided into two spheres, an earthly terrestrial sphere and an ethereal, god-like, or celestial sphere. On Earth, physical processes occurred according to certain physical laws, but these same laws did not apply to motions of objects in space, because the space beyond the Moon was considered to be a different realm of reality -- essentially spiritual (celestial) stages on the way to heaven. It was thought absurd to believe that processes in a pure, god-like celestial realm would obey the laws of motion of an impure, earthly realm. The Moon, Sun, and planets were not even considered physical places. For this reason, some important people of this time had a hard time believing the results of Galileo's telescopic observations, which seemed to show that the Moon had mountains and that Jupiter had moons of its own. That the telescope worked on Earth, that it revealed distant details of physical objects, proved nothing to those who believed that the telescope would not work in a celestial realm because this celestial realm contained no physical objects in the first place. As evidence for this, those who objected to Galileo's telescopic interpretations

would point to the fact that stars appeared smaller when viewed through a telescope. This provided clear evidence, they thought, that reality operated differently in the different realms and that the telescope distorted celestial truths. So, before Galileo's telescopic observations could be considered convincing, other beliefs had to change. People had to become convinced that there was no celestial realm, that the planets were physical places like that of Earth, and that the laws of nature operated in outer space as on Earth. Newton's great accomplishment was to show that the laws on Earth were truly universal and they applied in outer space as well. The same law of gravity, for instance, that applied on Earth applied throughout the universe.

According to the pragmatic or coherence theory of truth, this shows that any particular belief cannot be considered in isolation from other beliefs. Every belief derives its meaning from being part of a "web of belief." What we observe through a telescope may *stimulate* a new belief, but only other beliefs can be used to *justify* that belief. If we are open-minded and observant, we are constantly receiving novel stimuli from the world as part of our experience of being human. This constant stimulation will constantly pressure the coherence of our webs of beliefs, as the novel experience of observing something through a telescope did during Galileo's time. New ideas will emerge that are inconsistent with the current web of belief, causing a constant process of tense readjustment. To keep the web of beliefs coherent will require a constant process of questioning which beliefs need be accepted and which ones rejected.

There is much more to these discussions of truth.[23] For our purposes, it is sufficient to note that the realists and the postmodern pragmatists seem to agree on one thing. We must dispense with the assumption in Plato's thinking that truth is a categorical notion. No belief can be considered absolutely certain. Instead, we must replace the categorical notion with a one that allows for relative degrees of evidence, support, or justification. Instead of viewing true or false beliefs as statements that are really just categorically true or false, we need to think of beliefs as either reliable and practical guides or unreliable and impractical guides for dealing with the physical world and each other. I believe this view is correct. By a **reliable belief** we mean, then, a belief that seems to have certain features of evidence, support, or justification such that, based on past experience of evaluating beliefs, we find good reason for believing the belief will continue to work with our other beliefs and with new beliefs that result from novel experiences. For instance, as we will see in the next chapter, a reasonable person ought to believe that the statement, "Cigarette smoking is a principal cause of lung cancer" is a reliable belief, even though it could be found to be false someday.

You will probably need more examples before you understand this concept, and the next chapter attempts to give you concrete examples of reliable beliefs and techniques of support for them. For now, consider that what I am describing is an *attitude* toward truth

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[23] For further reading on these subjects, see Larry Laudan, ***Science and Relativism*** (University of Chicago Press, 1990); Richard Rorty, ***Objectivity, Relativism, and Truth*** (Cambridge University Press, 1991); ***Philosophy and the Mirror of Nature*** (Princeton University Press, 1981); ***Truth and Progress: Volume 3: Philosophical Papers*** (Cambridge University Press, 1998), and Ronald C. Pine, **Science and the Human Prospect** (Wadsworth, 1989; Prentice Hall, 2001, Amazon version, coming soon).

as well as a theory of what it is. This attitude is consistent with the general theme of this book: our disagreements and confusions will have a better chance of resolution if we use unforced, open, focused discussions, and a free but disciplined following of reasoning trails. Because there is a little bit of Plato in all of us -- we find it easier to have security, closure, and finality -- it will be healthy for us to think hypothetically rather than categorically, and to question, to be open, to be humble about what we think is true. By hypothetical thinking, I mean a process that says, "We have a good reason to believe that X is true, because we have a good reason to believe that Y is true, and we have a good reason to believe that Y is true, because we have a good reason to believe that Z is true." And then, "OK, if you agree that the reasoning trail just outlined is valid, that we stayed on track and did not let our biases or any irrelevant coloring tricks distract us, let us now think together whether we need to question Z also, or do we have good reasons to stop here?"

This attitude is rare because it implies the need for a mental toughness that is difficult for most people (including philosophers) to accept. Our need for security makes it difficult to accept a constant hypothetical tentativeness where at no point along our reasoning trails can we stop and rest and say this is completely true. By denying that anything is completely true, we have to be constantly ready to think again, for if something were completely true no further thinking would be necessary.

The Platonist in the back of our minds usually wants more than this. Just because we agree tentatively on where to stop, doesn't mean we are correct about what we agree on. Lots of people agree that God exists, but they could be wrong. And lots of people agree that God does not exist, and they also could be wrong. But what is advocated here is not mere agreement. There is a difference between mere agreement that is forced, the result of a trick, or the result of unanalyzed biases and mere cultural upbringing, on the one hand, and agreement that is the result of painstakingly following different trails that have been open to free inquiry. Both kinds of agreement could be wrong. But the one that is the result of free and disciplined inquiry allows for more opinions and rigorous tests, and permits the novel stimuli of experience to "speak" to us. This approach may be based on a kind of faith, but I would argue it is a reasonable faith. We believe that the more a belief is made to stand up to genuine tests, the more likely it is to be reliable.

In 1616, the Catholic Church decided that Galileo's ideas of a moving Earth and planets that were physical places should be prohibited from being taught and discussed. Because the church was one of the most powerful political institutions in the Western world, and because it funded a great deal of scientific research, this action was of great consequence. At the time, the church had some good reasons for believing that Galileo's ideas might be wrong. There were many unresolved issues, and even Galileo was unsure of the exact mechanism that would move our heavy Earth through space, keeping it in orbit around our Sun so far away, and keeping all of us from flying off the Earth because of its great speed of rotation. (No Newtonian conception of gravity yet existed.) But the agreement achieved by prohibiting Galileo's ideas was then the result of a forced agreement rather than a free and focused following of alternative reasoning trails. And like the father discussed in Chapter 1 who was afraid to test his daughter at Little League baseball, the

Catholic Church, by cutting off access to a reasoning trail, by not testing an alternative set of beliefs, was cutting off access to possible experiences of great benefit.

Bottom line time: In this book, we will be using **true belief** to mean **a reliable belief, a belief so well supported that it serves as a practical guide for dealing with each other and our experience (past, present, and future)**. By reliability we will mean a process of belief formation that is the result of both an ethical process -- tolerance for different opinions, promotion of open inquiry, and undistorted communication -- and a justification process: the belief in question has certain features of support that seem to have worked before in showing us beliefs likely to be reliable in the future.[24]

Let's simplify. For the notion of truth, we have three choices.

Relativism -- Everything is relative. All beliefs are true. No beliefs are wrong, because there can be no universal, certain, objective justification for any belief. All beliefs are based upon cultural influences.

Absolutism -- Some beliefs are certain, universal, and objective. See the discussion of Plato above.

Reliable Beliefs -- This concept is being advocated in this Chapter as the correct interpretation of truth. It is based on the philosophies of pragmatism and fallibilism. Some beliefs are universal and objective, but no belief is certain. Some beliefs have so much evidence for them that we should be able to say that they are probably true and that they serve as a practical basis for action. That is, the evidence is so overwhelming for a particular belief that a reasonable person would act as if the belief were true.

And let's take a concrete example. Suppose you are on the roof of a six story building. What do you think would happen to you if you jumped?

A relativist would make the technical point that we cannot be certain as to what would happen. If we are honest we cannot say with certainty that we know if the law of gravity is true everywhere on earth. We can't be certain, because our generalization has not been completely tested everywhere. There are billions of potential places that people could fall and these places have never been tested! There might be places where if a person jumped off a building a person would not fall. Furthermore, a relativist would say that gravity only seems true, because we have been brainwashed by our culture to believe it is true. It is possible to overcome any cultural belief by learning a different way of seeing reality, by learning or participating in a different culture for instance. In some cultures people practice meditation and claim that one can learn to change one's thoughts and defy gravity by levitating.

An absolutist would say the idea of relativism applied to gravity shows how silly relativism is. We know with certainty that if anyone jumps off a building, they will fall

[24] Philosophers call the study of this justification process epistemology: Literally, the study of, or justification of, knowledge.

regardless of what culture they are from. It is known absolutely and universally that gravity applies everywhere on earth. The law of gravity is an objective truth, and this truth is totally independent of one's culture. Take human beings from any culture and push them off a 6th story building. We know what will happen. They will fall. Case closed.

Followers of the concept of a reliable belief would say that both the relativists and the absolutists are partly right. First of all, they would agree with the relativists on the technical logical point about certainty. This agreement may surprise you. But we have to be logically honest. The case-closed argument of the absolutist may feel good, but technically we can't say that we know every possible place on this planet will obey the law of gravity when we have not tested those places. Our belief in gravity is a huge generalization and no generalization can be certain. But, the supporters of the concept of a reliable belief would say that the belief in gravity is objective and universal, that we have an overwhelming amount of evidence -- from the personal experiences of childhood falling off beds to watching tragic events, such as the people jumping out of the windows of the World Trade Center towers and plane crashes -- that anyone, no matter what culture they are from, would probably fall from a tall building if they jumped. We have an overwhelming amount of evidence to know that *the practical way* to live your life is not to jump off buildings.

This distinction between a belief that has certainty and a belief that appears to be practical to believe is not just an ivory tower distinction of no consequence. As we will show in Chapter 3 a common trick used to get people to reject beliefs they should accept is to argue that the beliefs are not certain. For instance, many people don't believe that the well-supported theory of natural selection (Darwin's theory of evolution) is true. But scientists believe that the evidence for this theory is so overwhelming and its truth has such vast implications for our health and survival, that not thinking of the theory as a reliable guide is like not believing in gravity.

With this in mind, we must now examine what it means for a belief to have certain features such that it is likely to continue to be reliable in the future, what it means to say that a belief is reliable given the evidence. How do we establish long-term reliability? This will be the subject of Chapter 3.

Before we switch to this subject, however, we can make a few important comments on the nature of logic and values from this perspective of the nature of truth.

Logic is defined in most logic textbooks as a study of the principles used in correct thinking. But what is the status of these principles? Are they Platonic principles? Are they self-evident, necessarily true for all times and cultures? If Plato's conception of truth is unrealistic and unjustifiable, then such a conception of logic that gives an above-it-all, timeless, inhuman quality to its principles will be difficult to justify as well. Better will be a perspective that defines logic as a practical set of principles, or a shared set of thinking tools painstakingly derived from history and experience, that we have found beneficial for arriving at unforced agreement through the disciplined following of

reasoning trails. Techniques of logical analysis are habits of adaptation that work in keeping us on track when we want to test our beliefs in an arena of open and respectful inquiry.

For the issue of values consider the example of female circumcision. In some cultures, young girls have areas of their genitals surgically removed with razor blades or pieces of glass without any anesthesia. These areas would allow girls to experience pleasure during sexual intercourse and this is exactly what the men in those cultures want not to happen, believing that the girls and later women will either stay virgins until they are married or remain faithful to their husbands when they are married. In the United States when this procedure is conducted by families immigrating, the people are arrested for child abuse. If you are a relativist, the families are doing nothing objectively wrong; they are simply following their cultural tradition. On the other hand, if you are an absolutist you would support the notion of Universal Human Rights. Some ways of living are wrong and some are right, period. Young girls would have certain rights no matter what culture they are from.

The concept of a reliable belief also supports universal rights and the goal of normative ethics, but differs significantly with the absolutist approach on justification. We definitely should endorse universal rights, but not because Tom Jefferson ("We hold these truths to be self-evident") or George W. Bush are right ("we have a calling from beyond the stars to stand for freedom"). They might be, but the argument here is that reason alone, without a controversial and unproven appeal to a particular religion, can be used to justify universal rights. The connection between universal rights and reliable beliefs is that the just treatment of all people is the most practical way of living on this earth. We argue that the evidence is overwhelming that this is so.

There are many cultural traditions, but some of these traditions are "lost" traditions, such as slavery. They are lost traditions for good reason. The scientific evidence became overwhelming in the 17th century that the Earth was not the center of the universes and that the Earth moved around the sun. The evidence became overwhelming that it was no longer practical to believe that the Earth did not move. Similarly, the evidence over time became overwhelming that slavery was wrong, that there is only one race – the human species.

The point of thinking about values and believing in universal rights is to decide on what we would like all people to do -- not necessarily what they do now, but what they should do, what is really right, and what we would like to see in the future. Believing in universal rights also does not mean that we have to have a law for everything. For instance, a basic agreed upon universal right is freedom of religion. But it is a matter of deciding on basic fairness for people who live on the same planet and then doing all that we can to instill in the minds of people (via education and moral understanding) this sense of fairness and promoting the appropriate behavior whenever possible.

Key Terminology

Arguments	Protagoras
Premises	Normative ethics
Conclusion	Vague usage
Premise indicators	Ambiguous usage
Conclusion indicators	Denotative meaning
Descriptions	Connotative or intentional meaning
Explanations	Lexical definitions
Value judgments	Stipulative definitions
Relativist	Cognitive meaning
Socrates	Emotive meaning
Bureaucratic euphemisms	Correspondence theory of truth
Understanding vs. Judging	Fallibilists
Jargon	Empirical evidence
Plato	Coherence theory of truth
Self-evident truth and Absolutism	Reliable belief

Concept Summary

In appraising reasoning trails logicians slow our thinking down by formalizing such trails into **arguments**. Rather than just reacting quickly to an act of persuasion, logicians break the reasoning down into parts to see if the parts fit together well. First, we look for the main thrust of the argument, called the **conclusion**, and then identify the evidence offered, called the **premises**. Sometimes, indicator words help us in this process. Words such as *because* and *since* often indicate premises, and words such as *therefore* and *so* often indicate conclusions. We next judge the reasoning and then the truth of the premises.

Not all uses of language involve arguments, so we must first distinguish arguments from other uses, such as descriptions, explanations, and unsupported value judgments. **Descriptions** can be true or false, but until an attempt is made to prove that what is described is true, no argument is involved. **Explanations** often use the same indicator words as arguments, but what follows apparent premise-indicating words such as *because* is a debatable set of reasons why an agreed-upon event happened. Explanations attempt to give reasons why something happened; they don't attempt to prove that something

happened. In expressions such as "X, because Y," X is accepted in an explanation, whereas in an argument X is a controversial conclusion that is being argued for. **Value judgments** made without support are also not arguments, but they usually express concerns of great importance to us, and so they are often parts of arguments. **Relativists** believe that it is impossible to rationally argue for the acceptance of one value judgment over another. **Normative ethicists** believe that it is possible to argue for some value judgments; that some values are more rational to have than others are.

In argument analysis it is also important to pay attention to the meaning of words, otherwise we can easily be tricked into believing evidence is presented when it is not, or that evidence is stronger than it actually is. **Vague** or **ambiguous** usage of words easily invites incorrect inferences. Much can be assumed unfairly in the uncritical acceptance of particular meanings of words. A vague word or phrase can have many meanings. An ambiguous word or phrase has two or more meanings in a given context. The acceptance of definitions is linked with beliefs, and hence can be controversial and is often in need of independent argumentation. Words can also be used to emotionally "color" controversial persuasive appeals, but such coloring must be distinguished from evidence. From this it should not be inferred that emotion lacks a valuable role in deciding proper courses of action. Often, politicians and bureaucrats use a neutralized coloring with **euphemisms** to dull or desensitize matters of great concern to us. Such neutralization also should not be confused with evidence. **Denotative** and **connotative meaning**, **cognitive** and **emotive meaning**, and **lexical** and **stipulative definitions**, are some of the distinctions logicians use to regulate the fairness of language use in argumentation. The important point to remember is that bias, slanting, and unfairness in the use of words can interfere with the objective appraisal of a reasoning trail. We sometimes must be very picky and pay close attention to the words used in an argument, to get to the real issues that are often obscured behind the surface dazzle or neutralizing screens of tricky word usage.

At a deeper philosophical level, because we have distinguished between a reasoning trail and the truth content of that trail, we must also pay some attention to the meaning of the word *true*. The nature of truth is a great, perennial philosophical issue. The decisions philosophers have made about this concept have not just been part of a detached, philosophical, ivory-tower game, but have influenced the movers and shakers of history. In this book, I claim that a judicious and unpretentious conception of truth is assumed, one that sees our goal as accepting beliefs that are **reliable** or practical guides for life. By following disciplined reasoning trails and encouraging unforced, open discussion, it is possible to identify features of evidence, support, and justification for some beliefs such that these beliefs should be accepted as more likely reliable than others. This conception of truth implies an experimental attitude, a willingness to accept fallibility and self-correction, of valuing hypothetical thinking and tentative acceptance, rather than categorical thinking and a search for absolutes. From this perspective, logic is likewise viewed as a practical set of principles derived from past experience, principles that help us stay on track when we want to test for reliable beliefs. Similarly, value judgments on matters of great importance can be viewed as judgments on the most practical way of living and interacting on this planet given the evidence.

Exercises 

EXERCISE I -- True or False

1. Before a trail of reasoning can be logically appraised it must be formalized as an argument.

2. * From a logical point of view it is always best to judge the premises as being true or false before judging the reasoning of the argument.

3. A logical argument is the same thing as a verbal quarrel.

4. In formalizing arguments there is always one absolute, black-and-white interpretation.

5. In analyzing reasoning trails into arguments, the word *'because'* is most often a premise indicator.

6. * The word *'because'* is always a premise indicator.

7. The word '*so*' is often a conclusion indicator, but it is not always a conclusion indicator or an indication that an argument is involved.

8. Value judgments can stand alone as *bare* value judgments, but they also can be part of arguments.

9. In an explanation, what is to be explained is less controversial than the explanation.

10. * Clarifying the meanings of terms is not linked with our beliefs about what is true.

11. The goal of logical analysis is to avoid all creative and emotive uses of language. Being logical is always inconsistent with being creative or emotional.

12. The goal of clarifying terminology is to provide understanding prior to judging.

13. The principles of democracy are based on the philosophy of relativism and the belief that no set of values can be judged objectively as better than another.

14. In this book, a true belief will mean only those beliefs that are self-evidently true.

15. In this book, it is assumed that being logical is good, because logical analysis helps provide a focused way of testing our beliefs and arriving at reliable beliefs.

EXERCISE II

Determine which of the following passages contain arguments and which do not. For those that are arguments, structure each into premises and conclusions. For those that are not arguments, label each as a description, explanation, or bare value judgment. Explain (make a case for) your answers. Identifying which ones are arguments is most important.

1. Last summer I visited Great Britain and France. This summer I plan to visit Japan and Taiwan. When this trip is completed I hope to make a decision about which country to specialize in for my international relations degree. I'm having fun and am really in no hurry to make up my mind.

2. * Answer from military spokesman to a news reporter's question during Persian Gulf War concerning why the Stealth fighter operates in complete radio silence during wartime: "The stealth fighter operates in complete radio silence in wartime, because it flies at night at high subsonic speed, can't be picked up on radar and therefore is not monitored by AWACS early-warning radar planes."

3. If there is any implication that is clear from the U.S. Constitution it is that each of us has a right to control the processes that take place in our own bodies. This right to self-determination obviously covers everything that takes place in our bodies. A medical doctor can advise me on when to have an operation, but he or she cannot force me to have one. A woman has this same right to self-determination. Hence, abortion should be legal.

4. The government has a duty to protect the individual rights of all citizens. Because an unborn baby is as much a citizen as anyone else, the elimination of this citizen's life is tantamount to murder. Therefore abortion should be illegal.

5. People may think that I am strange, but I don't like ice cream and I don't like candy. I also don't like desserts. I also don't like sugar or cream in my coffee, and can't stand the sickly sweet taste of sodas.

6. * The greatest emotion that can be experienced by a human being is that of love, be it the bond between a parent and a child, two romantically involved people, or the brotherly feeling toward humankind in general. There is no higher value, no greater achievement, and no greater sense of fulfillment in life.

7. The latest test results on the educational achievement of U.S. students have again demonstrated poor performance compared to Japanese students of the same age. This is not surprising, because Japanese students know far more about the world,

are more proficient in science and mathematics, and are more often fluent in a second language. The reasons for this are obvious: Japanese students watch far less TV per week than US. students, and Japanese teachers are paid and honored a lot more. In Japan, teaching is a venerable profession; in the United States it is better to be a basketball player and make a million dollars a year than to be a teacher and make only thirty to forty thousand.

8. * A human being becomes truly happy only when natural potential is developed. Because a feeling of other-directedness rather than a sense of selfishness is a natural potential that seems to be developed after basic necessities are met, and because the unconditional love for another is an act of other-directedness, it follows that we ought to value and encourage conditions that promote love.

9. Most cable television seems to offer nothing but sex, violence, and teen-age self-indulgent music. The TV in every American house in this day and age is nothing but an idiot box offering passive cheap thrills for narrow-minded bit brains.

10. Contrary to popular opinion, from a scientific point of view it is very unlikely that extraterrestrial intelligent life exists in our galaxy. This is so, for the following reasons: The Sun is a star that is about 4.6 billion years old. The Earth was formed with the Sun, and intelligent life took at least this long to evolve on Earth. In assessing another star's chances for having planets with intelligent life, the star must be at least as old as the Sun. However, roughly half the stars in our galaxy are younger than the Sun. If intelligence takes 4 to 5 billion years to develop, these young stars cannot have intelligent life around them yet. We should also keep in mind that at least half the stars in our galaxy are part of binary star systems, and lifebearing planets could not survive the monstrous gravitational forces of binary systems. Accordingly, only a very small percentage of stars in our galaxy are suitable for planets with intelligent life.

11. * All planetary bodies in our solar system have received their fair share of meteorite hits throughout history, and scientists use the number of still-visible craters as a rough measure of the age of the surface. New observations of Venus from the Magellan spacecraft indicate that Venus is relatively free of blemishes created by meteorite impacts. By contrast, Mars and the Earth's moon wear old, pockmarked faces. The Magellan spacecraft has detected evidence of massive volcanic activity on Venus. Thus, recent volcanic activity on Venus must have resurfaced the entire planet.

12. John must have AIDS, because all people who have AIDS constantly have flu and cold symptoms and have an abnormal white blood cell count. John has had flu and cold symptoms for some time now and has an abnormal white blood cell count.

13. For more than forty years Congress has been controlled by the Democratic party, and look at the state of the country. It is time for a change. Vote Republican this

November.

14. Frogs and other species of amphibians are disappearing in alarming numbers on Earth, because they are being eaten by aliens from another galaxy who have established secret outposts on Earth.

15. The 9/11 World Trade Center attack was allowed to occur because God took away His circle of protection due to the United States support for gays and abortionists.

16. This week Aljazeera.net examines the viewpoint of several prominent Arab thinkers who champion an array of views and interpretations on Arab reform and democratization, each with a unique position on whether change needs to come solely from within, whether the United States and/or Europe should be involved at all, and whether Islam itself is in need of reform.

17. In this world of change, some things (should) not change….Our society (ought to rest) on a foundation of responsibility and character and family commitment. George W. Bush, speech to the Republican National Convention, 9/02/2004

18. Vote Barack Obama for president. People of color it is our time now. It is time for an historic change. Think of what black people have been through in this country and think of the opportunity we have now to elect the first African-American president. Imagine we have the chance to vote for a Hawaiian born, grandson-of-a-son from Middle America Kansas.

19. * Support the president and don't listen to his critics. Those who criticize the president's foreign policy, his development of a new class of offensive-deterrent nuclear weapons, and his plans to drill for oil in Alaska are just the usual suspects of left-wing crybabies who don't realize what the real world is like. It is a violent world with very real evil people in it. We will sometimes need to kill people before they have a chance to kill us. We need also to be more self-sufficient in terms of energy production so that we don't have to rely on people (Arab countries) who don't like us because we support Israel.

20. The child died because the parent's religious beliefs prohibited them from seeking medical attention. The parents believed that illness or health is a matter of God's will and one must have faith in God's decisions. They believed that prayerful communication with God is the only approach one with sincere faith can take in such matters, and that we must have faith in a higher power and a higher reality than this transient Earthly existence.

21. In a poll done for Newsweek magazine this week, 42 percent of the respondents continue to believe that Saddam Hussein was directly involved in the Sept. 11 attacks.

22. We are winning the battle against terrorism. We know this, because the United States is safer now than it was on September 10, 2001. Saddam Hussein is gone and Libya has renounced terrorism and weapons of mass destruction. Every few months we see the fruits of better intelligence and cooperation with the allies of civilization with significant arrests of Al Qaeda members. Al Qaeda is on the run and no longer has a sanctuary to train for more attacks on the United States.

23. We are losing the battle against terrorism. Only those subject to massive self-deception fail to see that this is so. Our own State Department warns Americans on the dangers of traveling to many countries. Most of the world would like to see our President defeated this November. The invasion of Iraq was a huge gift to Al Qaeda recruiters and is consistent with the key problem – we were attacked not because of who we are but for what we have done. In 1953 we overthrew a democratically elected government in Iran for control of Middle East oil. We tried unsuccessfully to overthrow the Syrian government. In Lebanon our CIA helped create a civil war. We supported Saddam Hussein when he was killing his own people with chemical weapons. The list goes on and on as to why we are hated by most people in the Middle East. We continue to send billions of dollars to Israel no matter what they do to the Palestinians.

24. Shop at Amazon.com. Everything that you need -- from computers, software, TVs, to books. And for a limited time, free shipping for any purchase over $25.

25. The world is becoming much warmer because the world's appetite for oil and fossil fuel burning continues unabated, the amount of carbon dioxide in the atmosphere continues to increase year by year at an alarming rate, and no country seems to be serious in developing renewable sources of energy.

For more practice in structuring arguments, and to prepare for the analysis of informal fallacies, provide an interpretation in terms of premises and conclusion for some of the section II exercises in Chapters 4 and 5.

EXERCISE III

Analyze the passages below and identify key words or phrases that are ambiguous, vague, controversial, or unfair. Explain why these words or phrases need further discussion and how they could lead to mistaken inferences.

1. The administration's latest attempt to stimulate the economy and moderate the inflation rate was an incomplete success.

2. In March 2011, the United States, as part of a UN mandate for a no fly zone, began bombing Libya military targets. Since the United States was already involved in two wars (Iraq and Afghanistan), there was great concern about

adding another military involvement in a Muslim country. When an Obama administration figure was asked if we were in another war, he said:

"It's not a war; it's a kinetic military action that is time-limited and contribution-limited on the front end. It is a frontloaded combat mission that will recede into a coalition. Our military efforts will be discrete and limited in their nature, duration, and scope."

3. * In order to complete the glorious victory against the American led infidels, the brave Iraqi forces strategically withdrew toward Baghdad.

4. As part of Operation Iraqi Freedom, after the surgical strikes in Fallujah many non-operative personnel were discovered due to the inadvertent destruction of soft targets.

5. In 1968, the Soviet Union invaded Prague with tanks. This action was described as "fraternal internationalist assistance to the Czechoslovak people."

6. When NASA's $264 million Genesis mission came to a sudden and violent end because a capsule returning with samples of the Sun slammed into the desert at nearly 200 miles an hour after its parachutes failed to open, a mission scientist told reporters that "we have an unquantified scientific degradation."

7. Famous statement from an administration official during the Nixon-Watergate scandal, after the discovery and release of secret tape-recorded conversations with Nixon and his staff. "All former statements as to the level of administrative involvement and knowledge of the Watergate break-in are now inoperative."

8. In preparation for a nuclear exchange between the United States and the Soviet Union, the United States has adopted a policy of mutually assured discontinuation, whereas the Soviet Union has adopted a policy of counterforce and anticipatory retaliation.

9. * Famous statement from Betty Ford, wife of former president Gerald Ford, on why she was at a special hospital for drug abuse: "I over-medicated myself (with alcohol and valium)."

10. Statement from the Vietnam War: "The misadventure of the termination of friendly force's live function was due to some incontinent ordnance."

11. * All intelligent people living on the brink of the twenty-first century, concerned with the moral growth of our nation, know that reproductive freedom for women is crucial for fulfilling the dream of our founding fathers. We should support on-demand abortion.

12. The anti-abortionists say that we are murderers. But as pro-choice advocates, our goal is the defense of freedom and liberty.

13. The abortionists say that we want to restrict the freedom of others. But as pro-life advocates, our goal is the defense of the right to self-determination for those who cannot yet speak on their own behalf.

14. A 1993 statement from the managing director of the French Atomic Energy Commission urging a resumption in nuclear testing on Mururoa Atoll in Polynesia: "From a scientific and technical point of view, the resumption is necessary to maintain the means and the development of nuclear dissuasion."

15. For the January 2004 State of the Union speech, Bush speech writers needed to make a case that it was not a mistake to invade Iraq, even though no weapons of mass destruction were found. After contemplating that they could have Bush say that Saddam Hussein possessed large stock piles of weapons of mass destruction (at one time), or that the Kay report had identified new programs to build weapons of mass destruction – the first was true *at one time* but was no longer true and the second was not true – the decision was made to say "the Kay Report identified dozens of weapons of mass destruction-related program activities. . ."

16. It is not true that Senator Kerry has flip-flopped on his support for the Iraq War. He has simply adjusted his position.

17. "Had we to do it over again, we would look at the consequences of catastrophic success – being so successful, so fast, that an enemy that should have surrendered or been done in, escaped and lived to fight another day." President George W. Bush, explanation to *Time* magazine (August 29, 2004) why the Iraqi resistance to American troops was underestimated.

18. Abu Musab al-Zarqawi (terrorist suspect): "The holy warriors made the international coalition taste humiliation (in Fallujah and Najaf, Iraq). . . lessons from which they are still burning."

19. "Yasser E. Hamdi is not a prisoner of war. He is an enemy combatant."

    Note: Hamdi was kept in prison for almost three years. During that time he was denied due process and a chance to contest the accusations against him at a judicial hearing, until the Supreme Court decision in June, 2004 ruled that Mr. Hamdi and enemy combatants like him had to be given the chance to challenge their detention. The court declared that "a state of war is not a blank check for the president." Hamdi was eventually released and allowed to return to Saudi Arabia, even though technically he was a United States citizen. No formal charges were made against Hamdi during the entire time of his detention.

    "Enemy Combatant" is a phrase used by the US Government in the aftermath of

9/11. In the judgment of the U.S. government if the president designates a person an enemy combatant they can be detained indefinitely without charge or trial by the authorities, with no right to appeal and no right to a lawyer - even if they are a US citizen. A prisoner of war is subject to just treatment under the Geneva Conventions which states in part that judgments of guilt should be "pronounced by a regularly constituted court affording all the judicial guarantees which are recognized as indispensable by civilized peoples."

20. The president of the United States did not sanction the torture of suspected al-Qaida terrorists, Iraqi prisoners, or other captives. Approved were exceptional interrogation practices for terrorism-related captives for the purposes of national security.

21. The Taliban terrorists retreated to their Pakistan sanctuary after the surprise attack on coalition forces attempting to secure the country for the upcoming democratic elections. (Hint: Suppose the word 'terrorists' was replaced with 'troops,' and 'sanctuary' was replaced with 'stronghold'? How would this change the meaning of the statement?

22. "We are in a process of absorbing the factors of the situation we're in and shedding the unreality that dominated at the beginning." *Washington Post*, August 14, 2005. An unidentified senior Bush administration official involved in policy since the 2003 Iraq invasion, commenting on the lowering of expectation on what could be expected to be accomplished in Iraq given deteriorating conditions in the summer of 2005. The original goals were purportedly a model new democracy for the Middle East, a vibrant market economy based on a self-supporting oil industry with vast oil reserves, and a grateful people free from Saddam Hussein and serious security or economic challenges. Critics claimed that the Bush administration never understood or even made an effort to understand the historical and cultural complexities of Iraq.

EXERCISE IV -- Essays

Write a descriptive essay addressing each of the following.

1. In July of 1991, Jeffrey L. Dahmer, a convicted child molester, was arrested for murder. At his apartment parts of eleven bodies were found. Police found skulls in a file cabinet and a closet, three headless torsos in a vat, three heads in a refrigerator, boxes filled with body parts, and a dresser stuffed with photos and drawings of mutilated bodies. Neighbors said that they experienced an overpowering stench coming from the apartment for months, and that from time to time they heard what sounded like a buzz saw and screams. Dahmer eventually confessed to the murders, plus cannibalism. From a moral point of view, explain

how a relativist and a normative ethicist would interpret the actions of Dahmer.

2. Search the Internet on articles on female circumcision. In a couple of paragraphs explain the difference between normative ethics and relativism. How would a relativist and a normative ethicist approach the issue of female circumcision? (Hint: A WRONG answer would be to claim that a normative ethicist would have ethical objections to female circumcision and a relativist would not.)

3. This chapter contains several controversial passages and analyses of examples. In your judgment, are any of the words or phrases that I have used ambiguous, vague, controversial, or unfair? If so, identify them and explain why you think they are unfair.

4. Explain the difference between truth as a categorical notion and as a hypothetical notion. Include in your essay a discussion of the following conceptions of truth: Plato's notion of self-evidence, the realist's correspondence theory, the pragmatist's coherence theory, and the notion of beliefs as reliable guides.

5. Do some research on the reasons given for and the reasons against the 2003 invasion of Iraq by the United States. Separate out as best you can from the emotional appeals and vague statements the good reasons given for both positions. Describe these reasons in a short essay.

ANSWERS TO STARRED EXERCISES:

I.

2. False.

We should resist reacting to the statements in the argument based on our personal beliefs. We should first identify the argument structure. What is the conclusion? What are the premises? Then we should judge the reasoning. If the premises are true, do they provide good reasons for the conclusion? Then we should discuss and examine whether the premises are true.

6. False.

The word *because* can also indicate an explanation.

10. False.

Meaning is linked with beliefs and the worldviews of language using groups. Hence, the uncritical acceptance of definitions of terms is as presumptive as the uncritical acceptance of beliefs.

II.

2. Explanation.

Although the words *because* and *therefore* are used in this passage, the fact that a Stealth fighter operates in complete radio silence seems accepted and an explanation is being offered for it. Because we don't know for sure the intent of the reporter's question, it is possible that this is an argument and the spokesman is attempting to justify the radio silence. The radio silence is agreed upon as occurring, but whether it is controversial or not is not clear. Most likely it is not controversial and is just being explained.

6. Value judgment.

Although controversial, there is no attempt to justify love as the highest value. Compare this one with # 8. The same value is noted, but in #8 the value of love is argued for as something everyone should have and promote.

8. Argument.

Unlike number 6, there is an explicit attempt to justify and encourage love as supreme value for all people. Unlike #6, the person is not just expressing their personal values, but arguing about values that all people ought to have. The phrase *it follows that is* a conclusion indicator.

Conclusion: We ought to value and encourage conditions that promote love.
Premise: A human being becomes truly happy only when natural potential is developed.
Premise: Developing other-directedness is a natural potential.
Premise: The unconditional love for another is an act of other-directedness.

11. Argument.

This passage is most likely an argument for a best explanation. That Venus has very few craters is being explained by resurfacing due to volcanic activity, and an argument for why this is the best explanation is offered. The conclusion is controversial; there could be other explanations, but evidence is being offered that this is the best explanation. The word *thus* serves as a conclusion indicator. Here, "X (Venus has few craters), because Y (recent volcanic activity)" is the conclusion.

Conclusion: Recent volcanic activity on Venus must have resurfaced the entire planet.
Premise: All planetary bodies in our solar system have received their fair share of meteorite hits throughout history.
Premise: Unlike some other planetary bodies in our solar system, Venus is relatively free of craters.
Premise: The Magellan spacecraft has detected evidence of massive volcanic activity on Venus.

19. Argument.

Conclusion: Support the president and don't listen to his critics.
Premise: Those who criticize the president's foreign policy, his development of a new class of offensive-deterrent nuclear weapons, and his plans to drill for oil in Alaska are just the usual suspects of left-wing crybabies who don't realize what the real world is like.
Premise: It is a violent world with very real evil people in it.
Premise: We will some times need to kill people before they have a chance to kill us.
Premise: We need also to be more self-sufficient in terms of energy production so that we don't have to rely on people (Arab countries) who don't like us because we support Israel.

III.

3. The phrase *strategically withdrew* is being used to color the fact that the Iraqi forces were being forced to retreat. A conclusion that Iraqi forces were victorious should not be inferred from such colored descriptions.

9. The phrase *over-medicated is* used to imply that the wife of a president of the United States was not doing something as serious (because her drugs were legal) as that of drug addicts who become addicted to illegal drugs. How would it sound if someone said, "I have been over-medicating myself with heroin, cocaine, and marijuana"?!

11. Although the phrases *intelligent people* and *moral growth* are presumptive, the phrase *reproductive freedom is* the most in need of argumentation. Those who are for legal abortion believe that a women should be free to choose to have an abortion or not, but those who oppose abortion believe that the fetus is a person and thus has a right (freedom) of self-determination. The use of this phrase colors the abortionists' position in a positive way without giving any evidence for the conclusion.