

Chapter One Terms List #1

Argument: An argument is a group of statements that express an inference.

Inference: A process by which new information is derived from evidence already possessed. For example, if it is true the classroom is blue and it is true the instructor hates the color blue, we can derive (or *infer*) that the instructor hates the color of the room. The inference is comprised of the entire process of reasoning: both the supporting evidence, and the new claim.

Statement: A sentence that has a **truth value** — in other words, a sentence that makes a claim that is either true or is false. *All* sentences in arguments are statements. **Only** statements have truth value.

Premises: The statements in an argument that provide the supporting evidence for the inference. Every argument has at least one premise.

Conclusion: The statement that states the inference being made by an argument. Every argument has only one conclusion.

2 questions to ask when evaluating an argument:

- 1) Are the premises true?
- 2) Do the premises support the conclusion?

Notice that we do **not** ask if the conclusion is true. The reason for this is that if the above two criteria are met, the conclusion must be true. Why? Because the premises are true and they support the conclusion. A conclusion that is well supported by true premises will also be true.

Principle of charity: Always interpret an *ambiguous* argument or passage in a way that is most favorable to the speaker, unless the speaker explicitly instructs you otherwise. For example, if interpreting an argument, always try to view it in the best possible light. If you are viewing a passage that would make a rather weak argument, but which could reasonably be seen as a nonargument, you should interpret the passage as a nonargument. Of course, if you are instructed by the speaker to view the passage as a nonargument (or to interpret an argument in a specific way), then you should do so.

Nonarguments: A nonargument is a statement, or a group of statements, which does not express an inference. They either make claims without providing factual support for those claims, or they list facts without making claims on the basis of those facts. There are several types of nonarguments. **Warnings** and **statements of belief** are nonarguments that make

claims without supporting evidence. For example, the statement “The cave is dangerous” is a warning. It makes a claim but provides no support for the claim.

The next two types of nonarguments are **descriptions** and **reports**. These nonarguments provide factual details but draw no conclusions from those details. For example, consider this report: “The Congressman was found at 12:00 am in bed with his secretary. The Congressman said that he was dictating a letter.” This simply reports the actions of the Congressman. It draws no conclusions or inferences about those actions. If we added a statement such as “The Congressman is having an affair with his secretary,” that would change the passage from a report to an argument, because we would now be drawing an inference.

Two additional types of nonarguments are **expository passages** and **illustrations**. These are nonarguments where a claim is stated, which is then developed by the other statements in the passage. The purpose of the other statements is not to *prove* the claim, but to indicate what the claim means. An expository passage, for instance, states a thesis statement, then develops that statement as a theme. Consider this example: “Blue is the most beautiful of all colors. It is the color of the sky, the color of the sea. It can be the color of sadness or the color of the bird of happiness.” Here we have a claim, that blue is the most beautiful of all colors. The remaining statements in the passage develop what the speaker meant by this claim. The other statements are not trying to prove this claim. Indeed, if we viewed this as an argument, it would be a very weak one, since the passage really gives no substantial support for the claim advanced.

An illustration works much the same as an expository passage. The difference is that an illustration does not state a theme and then develop it. Rather, it states a claim, and then illustrates it with specific examples. An example: “Heavy metal bands think it is important to have a gruesome name. Look at Black Sabbath, Megadeth, Slaughter and Slayer.” The first statement makes a claim. The second statement then gives specific instances of what the speaker considers to be “gruesome” names. The second statement is not designed to prove the first statement true. It is only intended to clue the listener in to what the speaker is talking about.

The challenge with illustrations and expository passages is that they can sometimes be interpreted as arguments. In such cases, we need to judge what the intent of the speaker was. Did she intend to give an argument? Or an illustration? Here’s an example of a passage that could be seen as either an argument or an expository passage. “Water is one of the most precious resources on earth. Life evolved from water; life still depends on water. With no water, there would be no food, no life.” You can view this as an exposition, with the claim “water is one of the most precious resources on earth” being simply expanded upon in the following statements. Or you can view those statements as offering support for the initial claim. ***You can see them as proving the claim.*** If you read the passage in that

fashion, then you would view it as an argument. This is reasonable, because the other statements in the passage provide firm support for the claim “water is one of the most precious resources.” This was not the case in the earlier expository passage considered.

The final two types of nonarguments are **conditional statements** and **explanations**. A conditional statement is a statement that has an if/then form. For example, the sentence “If today is Tuesday, then tomorrow will be Wednesday” is a conditional statement. The first part of a conditional statement (the clause contained between the words “if/then”) is the **antecedent**. The second part of a conditional statement (the clause after the word “then”) is the **consequent**. Conditional statements are important because they often figure in our reasoning processes. This is because conditional statements express **necessary** and **sufficient** conditions. A necessary condition is best thought of as a requirement. If we say that X is necessary for Y, we are saying that X is a *requirement* that must be met to get Y. For example, enrollment in Phil. 7 is a necessary condition for receiving credit for Phil. 7. If you do not enroll in the course, you cannot receive credit. Enrollment is *required* for credit. However, simply enrolling in the course does not imply that you will receive credit. Enrollment only makes receiving credit possible, nothing more. So meeting a necessary condition — meeting a requirement — only means that something else has now become *possible*. It does not mean that the additional event will actually occur.

A sufficient condition is best thought of as a *guarantee*. If X is said to be sufficient for Y, we are saying that the presence of X guarantees the presence of Y. For example, liking Britney Spears is a sufficient condition for having bad taste. A person who likes Britney Spears is guaranteed to have bad taste. Note that if someone does not like Britney Spears, this does not mean that they have good taste. They may still meet the condition of having bad taste — they might have the world’s largest Celine Dion CD collection. So if the sufficient condition is met, then that guarantees a certain result. If the condition is not met, the result might still occur. You might not like Britney Spears, yet still have bad taste.

There are also conditions which are both *necessary and sufficient*. Such a condition is both a requirement and a guarantee. For example, being a feathered egg-laying animal is a necessary and sufficient condition for being a bird. In order to be a bird, it is necessary (required) to meet this condition. Moreover, if something is a feathered egg-laying animal, then that guarantees (is sufficient for) it being a bird.

The reason that necessary and sufficient conditions are relevant to conditional statements is that conditional statements express such conditions. For example, it was said that liking Britney Spears is a sufficient condition for having bad taste. We can rephrase this in the form of a conditional statement: *If you like Britney Spears, then you have bad taste*. What this indicates is that the antecedent of a conditional statement expresses a sufficient condition. Whenever one writes or says a conditional statement, one is claiming that the antecedent is sufficient for the consequent. Similarly, conditional statements express necessary conditions. Liking

Britney Spears guarantees you have bad taste. What does that imply about the requirements for liking Britney Spears? Well, it means having bad taste is a requirement for liking Britney Spears. Having bad taste is a necessary condition for liking Britney Spears. Consider the conditional statement we created a moment ago: *If you like Britney Spears, then you have bad taste.* The second part of the conditional statement, the consequent, is expressing our necessary condition. This tells us that the consequent is a necessary condition for the antecedent, just as the antecedent is a sufficient condition for the consequent.

The last type of nonargument is the explanation. Explanations, like arguments, can be broken into two parts— the **explanandum**, which is the fact to be explained, and **explanans**, which are the statements which do the explaining. What is crucial in distinguishing explanations from arguments are two things. First, is the main point being expressed an accepted fact? If the main point is **not** an accepted fact, the group of statements **cannot** be an explanation. If the main point is an accepted fact, you must then ask another question. Are the other statements intended to shed light on the main point? If the answer is yes, then it is an explanation. There is one other way to test whether a group of statements is an argument or explanation. Look at the ordering of the statements. If the group of statements *builds down*— the main point occurs first, with the other statements occurring afterwards, that is an indication that it is most likely an explanation. If the group of statements *builds up*, then an inference is being made and it is most likely an argument. (Note: this assumes that the main point is accepted fact. Again, if it is not, then the passage cannot be an explanation).