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The Elements of Arguments

Language is used to perform some roughly distinguishable functions such as describing, narrating, questioning, explaining and arguing. This chapter explains some key concepts in the theory of argument and provides a basis for evaluating arguments. In what follows, the term “statement” refers to a sentence used to make an assertion that can be true or false. Sentences used to ask questions, give orders or express emotions are not statements since questions, orders and exclamations are neither true nor false.

Premises, Conclusions and Inferences

Definition An **argument** is a sequence of statements in which statements, called **premises**, are given as reasons or evidence for the truth of a statement, called the **conclusion**.

This differs somewhat from the common usage of the term “argument” that refers to a quarrel or dispute. In our sense of the term, quarrels or disputes are “arguments” only if the disputants offer support for their claims.

When people reason by means of arguments, they make **inferences**. People infer conclusions from premises. They use premises to support conclusions. Premises do not infer. Premises are parts of arguments. They are linguistic entities. Yet many people misuse the word “infer” by saying that premises infer a conclusion, or that a conclusion infers the premises. This is bad English. It is correct to say that premises imply or support a conclusion.

Distinguishing argumentative from non-argumentative discourse sometimes is difficult because the purposes of a given piece of discourse may be unclear. Consider the following passages:

1. **Argument** Since all persons are created equal, and are endowed by their Creator with certain unalienable rights, it can be concluded that no person, including Washington and Jefferson, can justly make another into a slave.
2. **Non-argument** We hold these truths to be self-evident, that all men are created equal and that they are endowed by their Creator with certain unalienable rights, among these, life, liberty and the pursuit of happiness.

3. **Argument** Oh no! My house must have burned down by now since I left a hot iron on a pair of pants I was pressing and I didn't turn it off.
4. **Non-argument** Yes, my house burned down the other day because I left a hot iron on a pair of pants I was pressing and I didn't turn it off.

Examples (2) and (4) are not arguments since neither provides statements as reasons for a conclusion. (2) makes claims without support, and (4) gives a causal explanation of an event. (3) and (4) are similar in content but different in purpose. (3) tries to give us reasons for accepting the claim that the house burned down. In (4), we already know that the house burned down, and the speaker explains why that event took place.

Although distinguishing between descriptions, arguments and explanations is not always easy, it becomes easier with practice. To become an effective critical thinker, you must train yourself to read and listen with an attitude attuned to logical structure and purpose. You must develop skills for analyzing and evaluating any kind of discourse. Studying the theory of argument found in this book will enable you to develop the attitude and skills needed for effective thinking.

Inference Indicators (Flag Words, Signal Words)

Definition An **inference indicator** is a word or phrase used to signal an inference from the premises to the conclusion of an argument.

Here are some expressions commonly used as inference indicators. You should become sensitive to the use of such words in what you read or hear, and you should always use them to ensure that others can identify the premises and conclusions of your arguments. This avoids needless confusion. Make a practice of underlining inference indicators when you encounter them. This helps to increase your sensitivity to their use.

Expressions Indicating that What Follows Is a Premise

since	for	is proved by
inasmuch as	can be shown by	as proved by
follows from	for the reason that	is entailed by
is implied by	is deduced from	can be concluded from
because	is shown by	assuming that

Expressions Indicating that What Follows Is a Conclusion

therefore	entails that	allows us to infer that
shows that	as a result	hence
ergo	so	proves that
consequently	it follows that	demonstrates that
thus	implies that	in conclusion

The absence of inference indicators may lead to misunderstanding and disagreement on whether an argument is intended. In their absence, we must rely on the context or just guess as to what the intended argument, if any, might be.

For example, the following passage without inference indicators may be interpreted in two ways.

Without Inference Indicators Lisa would have gone to Stanford if she had satisfied the entrance requirements. She won't be going to Stanford. She didn't satisfy the requirements.

1. **With Indicators** Since Lisa would have gone to Stanford if she had satisfied the entrance requirements, and since she won't be going to Stanford, we can conclude that she did not satisfy the entrance requirements.
2. **With Indicators** Lisa would have gone to Stanford if she had satisfied the entrance requirements. We can conclude that she won't be going to Stanford since she didn't satisfy the requirements.

(1) and (2) have different premises and conclusions. Their structures are portrayed below in "standard form." The solid line is read as "therefore." The statements above the line are premises, and the statement immediately below it is a conclusion.

STANDARD FORM OF (1)

Lisa would have gone to Stanford if she had satisfied the entrance requirements.
She won't be going to Stanford.

She did not satisfy the requirements.

STANDARD FORM OF (2)

Lisa would have gone to Stanford if she had satisfied the entrance requirements.
She didn't satisfy the requirements.

She won't be going to Stanford.

Note that some inference indicator expressions given above are not always used to indicate arguments. Consider the following examples:

1. **Temporal Use of "Since"** Since the time of our founding fathers, this nation has stood for freedom.
2. **Temporal Use of "Since"?** Since my baby left me, I found a new place to dwell. It's down at the end of Lonely Street at Heartbreak Hotel.
3. **Explanatory Use of "Because"** The house burned down because of the short-circuit in the frayed wiring underneath the carpet.
4. **Explanatory Use of "Because"?** Because their sheep tear out the grass by the roots and ruin our beautiful, God-given, cattle grazin' country, we gonna have to run them sheep herders all the way back to Australia.

In (1), "since" is used to make the unsupported assertion that from the time of our founding fathers, this nation has stood for freedom.

In (2), the most likely interpretation is that from the time that his baby left him, the author has found a new place to dwell. It is possible that he is explaining why he has found a new place to dwell. He would then be using "since" to point to his baby's leaving him as a reason for moving.

In (3), it is likely that we already know that the house burned down and need no argument to persuade us that it did. Thus, we take this as an explanation. The term “because” is being used to indicate the antecedent conditions that led to the fire and that explain why the house burned down.

In (4), it is not clear whether “because” is being used (a) to cite reasons to persuade us that we should run the sheep herders off the land, or (b) to explain why we have decided to run them off the land.

These considerations make clear that deciding whether discourse is argumentative, explanatory or descriptive will depend on our interpretation of the author’s intentions and on the context of his statements. It does not depend on language alone, and it calls for your good judgment.

If lack of inference indicators makes an argument unclear to you, try adding indicators to the discourse, and see whether the result makes sense to you.

You may need to ask yourself questions about the purpose of the discourse as well as the aim of each statement in a given passage:

What is the topic in question? Does the author take a stand on some part of this topic?

Is this an explanation of an event or an argument for the truth of a statement?

What is the author trying to get me to believe? What is she trying to prove? What question is she trying to answer?

Why did the author make this statement? What purpose does it serve in the passage?

Is the statement supported in the passage, or is it an unsupported claim? Is it used to support another statement?

Is the statement controversial, and so likely to be what she is trying to support with the other statements?

Such self-directed dialogue may help you fill in missing inference indicators and determine the purpose and structure of discourse.

EXERCISE 2.1 IDENTIFYING SIMPLE ARGUMENTS, PREMISES AND CONCLUSIONS

- A. For each of the following passages, underline each inference indicator word; explain its purpose if it is not indicating a premise or conclusion of an argument. If a passage contains an argument, bracket its claims and identify the premises and conclusion as done in the following examples.

Example 1: We can conclude that the Democratic candidate will not win the presidential election since he hasn’t built up any support in the western states and no one can win without that kind of support.

Answer:

We can conclude that 1[the Democratic candidate will not win the presidential election] since 2[he hasn’t built up any support in the western states] and 3[no one can win without that kind of support.] This is an argument with (1) as the conclusion and (2) and (3) as premises.

Example 2: Dad just hasn’t been the same since Mom died. He never goes out. He never meets with friends. It just seems like he doesn’t want to live anymore.