

Critical Thinking: A Student's Introduction

Chapter 2 Recognizing Arguments

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Arguments and Statements

Argument: Group of statements intended to prove or support another statement

- **Premises:** Statements in an argument offered as evidence or reasons why one should accept the conclusion
- **Conclusion:** Statement that the premises support/prove

Statement: Sentence/utterance that can be viewed as either true or false

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Statement Test

Does it make sense to put “it is true that” or “it is false that” in front of a sentence?

- If so, it is a statement
- If not, it is not a statement

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Statements, 1

Examples

- Red is a color
- Abortion is morally wrong
- Canada is in South America

More than one statement may be expressed in a sentence

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Statements, 2

Not all sentences are statements

- Examples of sentences that are not statements
 - What time is it? (question)
 - Close the window! (command)
 - Oh, my goodness! (exclamation)

Statements can be about subjective matters of personal experience as well as objectively verifiable matters of fact

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Tricky Statements, 1

Rhetorical question: Sentence that has the grammatical form of a question but is meant to be understood as a statement

- Examples
 - Don't you know smoking will kill you?
 - (Meaning: Smoking will kill you)
 - How am I supposed to do that?
 - (Meaning: I can't do that)

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Tricky Statements, 2

Ought imperative: Sentence that has the form of a command but is intended to assert what ought to be done

- Examples
 - “Do X!” really means “You should do X”
 - “Don’t blow-dry your hair in the tub!” really means “You should not blow-dry your hair in the tub”

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Identifying Premises and Conclusions

Indicator words provide clues that premises or conclusions are being put forward

- **Premise indicators:** Since, for, seeing that, inasmuch as, in view of the fact that, because, as, and given that
- **Conclusion indicators:** Therefore, hence, so, it follows that, wherefore, thus, and consequently

Indicators:

- May be misleading
- May be absent in some cases

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Finding Conclusions When Indicators Are Absent

- Find the main issue and determine the position of the writer or speaker on that issue
- Look at the beginning or the end of the passage; the conclusion is usually found in one of those places
- A statement is probably the conclusion if the word “therefore” fits well before it
- The “because” trick (fill in the blanks): The arguer believes (conclusion) because (premise(s))

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What Is Not an Argument? 1

Reports: Convey information about a subject.

- Examples
 - “More people moved to the south this year”
 - “Oil prices dropped today, thus so did gas prices”
 - Notice that, even though there is a conclusion indicator, this is still a report

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What Is Not an Argument? 2

Unsupported assumptions: When someone puts forth what he/she believes but does not intend for any of his/her statements to support another

- Examples
 - “People aren’t afraid of dying; they are afraid of not living”
 - “People like this course because of the professor”
 - Notice the presence of a premise indicator, but this is not a premise

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What Is Not an Argument? 3

Conditional (“if-then”) statements

- Example: If it rains, the picnic will be canceled
- Most common forms: If A then B. B if A.
- **Antecedent:** Part of the statement that follows the word “if”
- **Consequent:** Part of the statement that follows the word “then”
- Do not always take the “if-then” form
 - Example: In the event of rain, the picnic will be canceled

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What Is Not an Argument? 4

- Conditional statements are not arguments
 - Conditional: “If I was taller, I would play basketball”
 - Argument: “I am tall, so I would make a good basketball player”
- Some conditional statements do involve a process of reasoning
 - Example: If Rhode Island were larger than Ohio, and Ohio were larger than Texas, then Rhode Island would be larger than Texas
 - This statement asserts that if the first two statements are true, then the third statement is also true

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What Is Not an Argument? 5

- **Chain arguments:** Arguments can be composed entirely of conditional statements
 - Take the form “If A then B. If B then C. Therefore, if A then C.”
 - Example
 - If Bob is taller than Chris, then Bob is taller than Ann
 - If Bob is taller than Ann, then Bob is taller than Lori
 - Thus, if Bob is taller than Chris, then Bob is taller than Lori

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What Is Not an Argument? 6

Illustrations: Do not prove or support the claim but provide examples of the claim

- Example: “Many wildflowers are edible. For example, daisies and day lilies are delicious in salads.”
- Some arguments can look like illustrations because they use “counterexamples”
 - Example: “Many people think that all Star Trek fans are zit-faced nerds. But that is not true. For example, Christian Slater is a Star Trek fan, and he is not a zit-faced nerd.”

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What Is Not an Argument? 7

- When it is difficult to differentiate between an argument and an illustration, one must use the principle of charity
 - Principle of charity: When interpreting an unclear passage, always give the speaker or writer the benefit of the doubt

Explanation: Tries to show why something is the case, not to prove that it is the case

- Titanic sank because it struck an iceberg (explanation)
- Capital punishment should be abolished because innocent people may be mistakenly executed (argument)

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What Is Not an Argument? 8

- Parts of an explanation
 - **Explanandum:** Statement that is explained
 - **Explanans:** Statement that does the explaining
- Format (fill in the blanks): Explanandum because Explanans
- “I ski because I think it is fun” (explanation)
- “You should ski because it is fun” (argument)

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Tests to Distinguish Arguments and Explanations, 1

Common-knowledge test

- If the statement that a passage is seeking to prove or explain is a matter of common knowledge, it is probably an explanation
 - Most people don’t present arguments for things people already believe
 - Example: “TV is very influential in society because most people watch it”

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Tests to Distinguish Arguments and Explanations, 2

Past-event test

- If the statement that a passage is seeking to prove or explain is an event that occurred in the past, it is probably an explanation
 - Usually, people don't argue that "X occurred"
 - Example: "The U.S. entered World War two because of Japan's attack on Pearl Harbor"

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Tests to Distinguish Arguments and Explanations, 3

Author's intent test

- If the person making the statement is trying to "prove" something, then the passage is an argument
 - Example: "You want a college degree because you want a better life"
- If the person making the statement is trying to explain why something is true, then the passage is an explanation
 - Example: "Kevin is majoring in political science because he wants to go to law school"

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Tests to Distinguish Arguments and Explanations, 4

Principle of charity test

- One must interpret unclear passages generously
- One must never interpret a passage as a bad argument when the evidence reasonably permits one to interpret it as not an argument at all
- The test: If you have a choice between interpreting a statement as a “bad argument” or an “unsatisfactory explanation,” do the latter
 - A bad argument is a worse mistake