Logical Fallacies

Note: This document should only be used as a reference and should not replace assignment guidelines.

Strong, logical arguments are essential in writing. However, the use of faulty logic or reasoning to reach conclusions discredits arguments and shows lack of support and reasoning. This handout lists some of these logical errors—called **logical fallacies**—that are most commonly encountered.

Appeal to Authority

Accepting someone's argument because of his or her authority in a field unrelated to the argument, rather than evaluating the person's argument on its own merits. (Also called *Argumentum ad Verecundiam,* or "argument from modesty")

> EXAMPLE: My dentist says she's voting for the conservative candidate, so I will too.

Appeal to Emotion

Exploiting the audience's feelings to convert them to a particular viewpoint. Appeals to fear, flattery, ridicule, pity, or spite are among the most common forms this fallacy takes. In some circumstances, appealing to emotion may be appropriate, but writers should avoid appeals to emotion when reason and logic are expected or needed.

> EXAMPLE: I'm sure someone with your vast experience can see that plan B is better.

Appeal to Ignorance

Basing a conclusion solely on the absence of knowledge. (Also called *Argumentum ad Ignoratiam*)

> EXAMPLE: I've never seen an alien, so they must not exist.

Appeal to Popular Opinion

Claiming that a position is true because most people believe it is. (Also called *Argumentum ad Populum*)

> EXAMPLE: The governor has high approval ratings; he is therefore doing a good job.

Attacking the Person

Discrediting an argument by attacking the person who makes it, rather than the argument itself. (Also called Poisoning the Well or *Argumentum ad Hominem)*

> EXAMPLE: Don't listen to Becky's opinion on welfare; she just opposes it because she's from a rich family.

Appeal to Hypocrisy

Literally—'you also': A type of ad hominem argument that follows the following format: A argues against B, but A also participates in B, therefore A's argument is wrong. (Also called *Tu Quoque*)

> EXAMPLE: Jeffrey is of the opinion that the Iraq war is unjust. Jeffrey is himself in the National Reserve, so his opinion is wrong.

Begging the Question

Using a premise to prove a conclusion when the premise itself assumes the conclusion is true. (Also called Circular Reasoning, *Circulus in Probando,* and *Petitio Principii*)

> EXAMPLE: I know I can trust Janine because she says that I can.

Complex Question

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Combining two questions or issues as if they were one, when really they should be answered or discussed separately. Often involves one question that assumes the answer to another.

> EXAMPLE: Why did you steal the CD? (Assumes you did steal the CD)

Composition
Assuming that because parts have certain properties, the whole does as well. (The reverse of Division)

> EXAMPLE: All the parts of the engine were lightweight, so the engine should have been lightweight.

Correlation Implies Causation
Concluding that because two things occur at the same time, one has caused the other. (Also called *Cum Hoc Ergo Propter Hoc*)

> EXAMPLE: There was a full moon the night I had my car accident, so I'm never driving again under a full moon.

Division
Assuming that because a large body has certain properties, its parts do as well. (The reverse of Composition)

> EXAMPLE: That company donates a lot of money to charity, so every person who works there must be a charitable person.

Equivocation
Applying the same term but using differing meanings.

> EXAMPLE: The sign by the pond said, "Fine for Swimming," so I dove right in.

False Cause and Effect
Claiming that because one event occurred before a second, it caused the second. (Also called Coincidental Correlation and *Post-Hoc Ergo Propter Hoc*)

> EXAMPLE: Joan was scratched by a cat while visiting her friend and came down with a fever two days later. The cat's scratch therefore caused the fever.

False Dilemma
Suggesting only two solutions to a problem when other options are also available. (Also called Bifurcation)

> EXAMPLE: You can either be pro-choice or pro-life; there is no middle ground.

Hasty Generalizations
When a writer arrives at a conclusion based on inadequate evidence or a sample that is too small.

> EXAMPLE: I liked the last Chinese restaurant I went to, so I will like every Chinese restaurant in the world.

Ignoring the Issue
Shifting the reader's attention from the real issue to a different argument that might be valid, but is unrelated to the first. (Also called Arguing beside the Point and *Ignoratio Elenchi*)

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EXAMPLE: No, the suspect won't say where he was on the night of the crime, but he does remember being abused repeatedly as an innocent child.

Non Sequitur

Using a premise to prove an unrelated point. Two common *non sequitur* fallacies include Affirming the Consequent and Denying the Antecedent.

- **Affirming the Consequent:** *Non sequitur* fallacy that takes the following pattern:

  If A is true, then B is true.
  A is false.
  Therefore, B is false.

  EXAMPLE: If I am a Texan, then I am an American. I am not a Texan. Therefore, I am not an American.

- **Denying the Antecedent:** *Non sequitur* fallacy that takes the following pattern:

  If A is true, then B is true.
  B is true.
  Therefore, A is true.

  EXAMPLE: Dogs are animals. Fluffy is an animal. Therefore, Fluffy is a dog.

Red Herring

Introducing an unrelated or invalid point to distract the reader from the actual argument. Appeal to Emotion, Attacking the Person, Ignoring the Issue, and Straw Man are a few examples of Red Herring fallacies.

EXAMPLE: Protestors worried about abortion ending lives should spend more time investigating the impact of handguns in childhood deaths.

Slippery Slope

A fallacy based on the fear that one step will inevitably lead to the next.

EXAMPLE: Embryonic stem cells used for research will lead to full-scale reproductive cloning.

Stacking the Deck

When a writer tries to prove a point by focusing on only one side of the argument while ignoring the other.

EXAMPLE: Summer is the best season because it's warm and sunny, everything is green, and people can swim outdoors. (No mention of intense heat, insects, or any consideration of other seasons.)

Straw Man

Attacking one of the opposition's unimportant or small arguments, while ignoring the opposition's best argument.

EXAMPLE: People from Quebec want to secede from Canada to get their own currency. Don't they realize money isn't everything?