Logical Fallacies

In reasoned essays, rational thought is very persuasive. One of the ways writers demonstrate their credibility is through logical argumentation. However, if a writer commits a logical fallacy (an error in reasoning), they damage the credibility of their argument. Sometimes these errors are committed by mistake, but sometimes they are evidence of unethical argumentation.

As readers, we need to watchout for logical fallacies, especially when the writer is trying to convince us of something. As writers, we need to be careful not to commit errors in logic because we might risk losing the trust readers have placed in us.

Below you will find some common types of logical fallacies.

Loose Generalization (or "absolutism")

A statement that is overly broad and sweeping, such as "Humans are greedy and selfish." Sometimes essays begin with overly "cosmic" openings such as "Since the beginning of time..."

Tip: Avoid absolute words like: everyone, no one, all, ever, none, never, every.

Invalid Inference

Drawing conclusions not sufficiently well supported by evidence. "More people in America drink Budweiser than any other beer. Therefore you, too, should drink Budweiser."

Post Hoc Ergo Propter Hoc (X happened before Y; therefore, X caused Y) "He got straight A's because he smoked a cigarette before every lecture."

Tip: Make sure that time is not the only thing linking cause and effect.

Non Sequitur ("it does not follow")

The conclusion does not follow logically from the given premises. "He's certainly sincere; he must be right."

Tip: Be precise in distinguishing the relevant from the irrelevant.

Circular Reasoning (or "begging the question")

Using as evidence what you are setting out to prove. "Freud's investigations were truly scientific because they were based on Freud's own clinical research." Or "You can trust me because I will never lie to you."

Tip: Check carefully that the proposition and the evidence are not the same thought expressed in different words.

False Authority ("ipse dixit")

Arguing that a person who is competent in one field will necessarily be competent in another.

Tip: Be certain that your sources are authorities in their fields.

Straw Man

Misrepresenting an opponent's position to make them easier to attack, or going after a weaker opponent while ignoring a stronger one. Politicians do this all the time.

Slippery Slope

Objecting to a particular action on the grounds that once that action is taken, it will lead inevitably to a similar but less desirable action, and so on down the slippery slope until the horror lurking at the bottom is reached. "Contraceptives should not be made available on college campuses because easy availability will send a condoning message, thus leading to increased promiscuity, 'free love,' and the eventual destruction of our moral foundation as a society."

Ad Hominem ("to the person")

Attacking the opponent him or herself rather than the opponent's evidence and arguments. "Anyone who opposes Measure 37 should be ignored because they are all tree-hugging granola munchers."

Appeal to Ignorance ("argumentum ad ignorantiam")

Arguing from the absence of proof that one's position is false to the contrary conclusion that it therefore must be correct. "Until someone has proved that ESP is impossible, we are entitled to believe it is true."

False Dilemma (or oversimplification)

Arguing from the premise that there are just two possible solutions to a problem or issue when, in fact, there is at least one other. "Black and white reasoning," such as "You're either with us or against us," or "America: love it or leave it." Another example: Arguing that differences in behavior between the sexes are due either to heredity or to the environment, neglecting the likely possibility that both of these factors play a role.

Tip: Qualify your statements; recognize other alternatives that may exist.