

Logical Fallacies

Some common types of logical fallacies are listed below with explanations and examples.

ad hominem: (*Latin – “to the person”*) logical fallacy in which the writer attacks the person who presents the issue rather than deal logically with the issue itself.

Example:

"How can you argue your case for vegetarianism when you are enjoying your steak?" *This clearly shows how a person is attacked instead of being addressed for or against his argument.*

bandwagon: logical fallacy in which the writer uses the argument that because everyone believes in something, it must be true.

Example:

"If many believe so, it is so."

begging the question: logical fallacy in which the writer presents an assertion that simply restates the point just made.

Example:

"Exposure to asbestos is carcinogenic because it causes cancer"

either-or fallacy: logical fallacy in which the writer states that only two alternatives exist when in fact there are more than two.

Example:

"Either you are for us, or you are against us."

equivocation: logical fallacy in which the writer presents an assertion that falsely relies on the use of a single term in two different senses.

Example:

"Their position on nuclear power is right – as far right as you can get."

"Do women need to worry about man-eating sharks?"

false analogy: logical fallacy in which the writer uses the assumption that because two things are alike in some respects, they are alike in all respects.

Example:

"The model of the solar system is similar to that of an atom, with planets orbiting the sun like electrons orbiting the nucleus. Electrons can jump from orbit to orbit; so we should study ancient records for sightings of planets jumping from orbit to orbit."

false authority: logical fallacy in which the writer uses the assumption that an expert in one field is also an expert in another.

Example:

"You acted on one episode of the “Emergency Ward” series, so you should know. Is this medicine really good for ulcer cases?"

false cause: logical fallacy in which the writer makes the assumption that because one event follows another, the first is the cause of the second.

Example:

"He had an accident because it was Friday the thirteenth."

guilt by association: logical fallacy in which the writer uses an unfair attempt to make someone responsible for the beliefs or actions of others.

Example:

"All dogs have four legs; my cat has four legs. Therefore, my cat is a dog." (From *Yes, Prime Minister*)

hasty generalization: logical fallacy in which the writer uses a generalization based on too little evidence or on exceptional or biased evidence.

Example:

"My father smoked four packs of cigarettes a day since age fourteen and lived until age sixty-nine. Therefore, smoking really can't be that bad for you."

non sequitur: (*Latin – “it does not follow”*) logical fallacy in which the writer uses a statement that does not follow logically from what has just been said--in other words, a conclusion that does not follow from the premises.

Example:

"You will do what I say because you are my wife!"

"This assumption should be correct because it was Einstein who originally made it."

oversimplification: logical fallacy in which the writer uses a statement or argument that leaves out relevant considerations about an issue.

Example:

"Why me?"

"Capital punishment is the only effective way to prevent murders."

red herring: logical fallacy in which the writer dodges the real issue by drawing attention to an irrelevant issue (sometimes called "ignoring the question").

Example:

Boy: Mom, can I go to a party tonight?

Mother: How can I be sure you won't drink alcohol?

Boy: Oh mom, how can you even think that when I've been doing homework all day!

slippery slope: logical fallacy in which the writer makes the assumption that if one thing is allowed, it will be the first step in a downward spiral.

Example:

"If we legalize marijuana, then it will eventually lead to the legalization of LSD, then cocaine, then heroin, then meth, etc."