Certain types of argumentative moves are so controversial they’ve been classified as fallacies: errors in reasoning that render an argument invalid. To be more specific, a fallacy is an “argument” in which the premises given for the conclusion do not provide the needed degree of support.

Fallacies raise questions about the ethics of argument – that is, whether a particular strategy of argument is fair, accurate, or principled. Fallacies are arguments flawed by their very nature or structure; as such, you should avoid them in your own writing and challenge them in arguments you hear or read.

Here are some general guidelines to help you avoid logical fallacies in your arguments:

- Do not claim too much: No writing will completely solve or even fully address all problems involved in a complex topic.

- Do not oversimplify complex issues: You selected your topic because it is controversial and multifaceted. If you reduce the argument to simplistic terms and come up with an easy solution, you will lose your credibility and diminish your ethos.

- Support your argument with concrete evidence and specific proposals, not with abstract generalizations and familiar sentiments. Always assume that your audience is skeptical, expecting you to demonstrate your case reasonably, without bias or shallow development.

To help you understand fallacies, they can be classified into three groups: fallacies of pathos, ethos, and logic: emotional fallacies, ethical fallacies, and logical fallacies

**Emotional Fallacies: Offenses Against Pathos**

Emotional arguments, those making pathos appeals, can be both powerful and suitable in many circumstances, and most writers use them frequently. However, writers can violate the good faith on which legitimate argument depends. Readers won’t trust a writer who can’t make a point without frightening someone or stirring up hatred.

**Ad Baculum** (or “scare tactics”): making an argument by scaring people and exaggerating possible dangers well beyond their statistical likelihood. Creating fear in people does not constitute legitimate evidence for a claim, and is therefore fallacious. Scare tactics are remarkably common in everything ranging from ads for life insurance to threats of audits by the IRS. Such ploys often work because it’s usually easier to imagine something terrible happening than to appreciate its statistical rarity. Scare tactics are often used to stampede legitimate fears into panic or prejudice.

*Example:* If you don’t have a gas masks stocked in your home you’re putting your family at risk of dying during a chemical attack, which could happen any time.
False Dilemma (or “Either-Or Reasoning”): the tendency to see an issue as having only two sides or choices. A way to simplify complex arguments and give them power is to reduce the options for action to only two choices. The writer’s preferred option might be drawn in the warmest light, whereas the alternative is cast as an ominous shadow. In some cases, either-or arguments can be well-intentioned strategies to get something accomplished. But such arguments become fallacious when they reduce a complicated issue to excessively simple terms or when they’re designed to obscure legitimate alternatives. Like most scare tactics, either-or arguments are purposefully designed to seduce those who don’t know much about the subject under discussion. Very often, we don’t have to choose one side over the other. Furthermore, the two possibilities or choices presented are not mutually exclusive.

Example: “Our troops know they’re fighting in Iraq...to protect their fellow Americans from a savage enemy. They know that if we do not confront these evil men abroad, we will have to face them one day in our own cities and streets.” – George W. Bush

Slippery Slope (also known as “the camel’s nose”): an argument that casts today’s tiny misstep as tomorrow’s slide into disaster. Of course, not all arguments aimed at preventing dire consequences are slippery slope fallacies; a slippery slope argument becomes a fallacy when a writer exaggerates the likely consequences of an action, usually to frighten readers. Ideas and actions do have consequences, but they aren’t always as dire as some writers would have you believe.

Example: We’ve got to stop them from banning pornography. Once they start banning one form of literature, they will never stop. Next thing you know, they will be burning all the books – including Shakespeare and the Bible!

Ad Populum (or “appeal to popularity”): a misconception that a widespread occurrence of something is assumed to make an idea true or right.

Example: There is nothing wrong with requiring multicultural classes in high school, even at the expense of core subjects like math and science. After all, all of the universities and colleges are pushing multiculturalism.

Bandwagon (also known as “peer pressure”): an argument that urges people to follow the same path everyone else is taking. Some bandwagon appeals are obvious, such as when a child says, “Everyone else is going camping this weekend. So, why can’t I?” The simple response to that is: “And if everyone is jumping off a cliff, you will too?” But most bandwagon appeals are not so transparent. Many people are easily seduced by ideas endorsed by the mass media and popular culture. We are encouraged to become obsessed by issues that the media select for our attention. In recent decades bandwagon issues include the war on drugs, health care reform, gun control, drunk driving, welfare reform, teen smoking, and illegal immigration. In the atmosphere of obsession there’s a feeling that everyone must be concerned by the issue-of-the-day, and something – anything – must be done! Sometimes bandwagons run out of control – as they did in the 1950’s when some careers were destroyed by “witch hunts” for suspected Communists during the McCarthy era.

Example: The vast majority of countries throughout the world refuse to boycott the summer Olympics in China, so why should the United States call for a boycott?

Sentimental Appeals: arguments that use tender emotions to excessively distract readers from the facts. Quite often, such appeals are highly personal, focusing attention on heart-warming or heart-wrenching situations that make readers feel guilty if they challenge what is being proposed. There are a number of different types of sentimental fallacies; one of the most common is: Ad Misericordiam (or “Appeal to Pity”) in which a claim intended to create pity is substituted for evidence in an argument.
Example: If you are spending $200 each month on dining out at luxurious restaurants, you should be ashamed of yourself. Don’t you know that if you sent that $200 to UNICEF, you would be feeding ten starving children in Africa each month?

**Ethical Fallacies: Offenses Against Character**

Readers tend to give their closest attention to authors who they respect or trust. So, writers typically want to present themselves as honest, well-informed or sympathetic in some way. But “trust me” is a scary warrant. Not all the devices writers use to gain the attention and confidence of readers are admirable.

**Ad Hominem** (“against the man”): an argument is rejected on the basis of some irrelevant fact about the author of or the person presenting the claim or argument. The reason it is a fallacy is that the character, circumstances, or actions of a person do not (in most cases) have a bearing on the truth or falsity of the claim being made (or the quality of the argument being made). Destroy the credibility of your opponents, and you either destroy their ability to present reasonable appeals or you distract from the successful arguments they may be offering. In other words, it is fallacious to attack an idea by attacking the unchangeable traits of its author.

*Example:* Fr. Morris believes that abortion is wrong, but that’s because he’s a priest – just a lackey to the Pope -- so I can't believe anything he says.

**Poisoning the Well** (also known as “smear tactics”): a specific kind of ad hominem, this sort of fallacy involves trying to discredit what a person might later claim by presenting unfavorable information (be it true or false) about the person in order to produce a biased result. A person committing this fallacy “poisons the well” by making his opponent appear in a bad light before he even has a chance to say anything.

*Example:* Hilary Clinton has been proven to be a liar numerous times, so don’t believe anything she tells you.

**Irrelevant Authority:** when an appeal is made to a well-known personality or some other person who is not a legitimate authority on the subject being discussed. If person A is not qualified to make reliable claims in subject S, then the argument will be fallacious. In such cases the reasoning is flawed because the fact that an unqualified person makes a claim does not provide any justification for the claim. The claim could be true, but the fact that an unqualified person made the claim does not provide any rational reason to accept the claim as true.

*Example:* I'm not a doctor, but I play one on the hit series “Hospital.” You can take it from me that when you need a fast acting, effective and safe pain killer there is nothing better than MorphiDope 2000. That is my considered medical opinion.

**Dogmatism:** asserting or assuming that a particular position is the only one conceivably acceptable. People who speak or write dogmatically imply that there are no arguments to be made: The truth is self-evident to those who “know better.” Often times these fallacies begin with *No rational person would disagree that... or It’s clear to anyone who has thought about it that...* In general when someone suggests that merely raising an issue for debate is somehow “unacceptable” or “inappropriate” or “outrageous” – whether on grounds that it’s racist, sexist, unpatriotic, blasphemous, insensitive, or offensive in some other way – you should be suspicious.
Example: If you are truly a patriotic American, there is no way you can possibly suggest that the President should pull our troops out of Iraq.

Moral Equivalence: suggests that serious wrongdoings don’t differ in kind from minor offenses or vice versa: relatively innocuous activities or situations raised to the level of major crimes or catastrophes.

Example: Smoking cigarettes is nothing short of suicide: The smoker is willingly killing himself.

Common Logical Fallacies: Offenses Against Logic

You will encounter a fallacy in any argument when the claims, warrants, and/or evidence in it are invalid, insufficient, or disconnected. Logical fallacies pose a challenge to civil argument because they often seem quite reasonable and natural, especially when they appeal to people’s self interest.

Hasty Generalization: drawing a general and premature conclusion on the basis of insufficient evidence, e.g., only one or two cases. Hasty generalizations form the basis for most stereotypes about people or institutions: because a few people in a large group are observed to act in a certain way, one infers that all members of that group will behave similarly. The resulting conclusions are usually sweeping claims of little merit. English teachers are nit-pickers. Scientists are nerds. Art teachers are flaky. In order to draw valid inferences, you must always have sufficient evidence and qualify your claims appropriately: some, a few, many, most, occasionally, rarely, possibly, in my experience, etc.

Example: Dallas Police Chief Christopher Michaels suggested that all dogs be muzzled because two Golden Retrievers have been disturbing the peace in Fritz Park.

Begging the Question: taking for granted something that really needs proving, i.e., assuming as true the very claim that’s disputed

Example: If such actions were not illegal, then they would not be prohibited by the law.

Example: The belief in God is universal. After all, everyone believes in God.

Example: Congressman Jones can’t be guilty of accepting a bribe; he is an honest man.

The problem with a claim that “begs the question” is that it is made on grounds that cannot be accepted as true because those grounds are in doubt. How, for example, can the accused bribe-taker defend himself on the grounds of honesty when his honesty is what is in question? Even though someone with a record of honesty is less likely to accept bribes, a claim of honesty isn’t an adequate defense against specific charges.

Post Hoc Ergo Propter Hoc (or “Faulty Causality”): meaning “after this, therefore because of this,” it is the fallacious assumption that because one event or action follows another, the first necessarily causes the second. Causal claims should always be subject to scrutiny.

Example: A writer sued the Coors Brewing company claiming that drinking copious amounts of the company’s beer had kept him from writing a novel.

Equivocation (or “Doublespeak”): an argument that gives a lie an honest appearance. Consider the plagiarist who copies a paper word-for-word from a source and then declares, “I wrote the entire paper myself,” meaning that she physically copied the piece on her own. But the plagiarist is using “wrote”
equivocally – that is, in a limited sense, knowing that most people would understand “writing” as something more than mere copying of words.

*Example:* All banks are beside rivers. Therefore, the financial institution where I deposit my money is beside a river.

**Non Sequitur:** meaning “it does not follow,” a inference or conclusion that does not follow established premises or evidence: one point does not follow from the other. Non sequiturs occur when writers omit a step in an otherwise logical chain of reasoning, assuming that readers agree with what may be a contestable claim. For example, it’s a non sequitur to argue that the comparatively poor performance of American students on international mathematics examinations means the U.S. should spend more money on math education. Such a correlation might be justified if a correlation were known to exist between mathematical ability and the amount of money spent on math education. But the students’ performance might be poor for reasons other than education funding.

**Straw Man:** attacking an argument that is much weaker or more extreme than the one the opponent is actually making. By “setting up a straw man” the writer has an argument that’s easy to knock down and proceeds to do so, then claiming victory over the opponent – whose real argument was quite different. In other words, they choose to refute arguments that go beyond the claims their opponents have actually made.

*Example:* Advocates of intelligent design claim that life was created by some white-haired figure in the sky.

**Faulty Analogy:** an analogy is proposed which either contains misleading comparisons, or leaves out important differences that make the analogy weak. Analogies are ways of understanding unfamiliar ideas by comparing them with something that’s already known. Useful as such comparisons are, they may prove quite false either on their own or when pushed too far or taken too seriously. At this point they become faulty analogies, inaccurate or inconsequential comparisons between objects or concepts.

*Example:* Doctors are allowed to look up difficult diagnoses in their medical textbooks, so students should be able to look up tough test questions in their texts.

*Example:* Making people register their own guns is like the Nazis making the Jews register with their government. This policy is crazy.

**Red Herring** (also known as Ignoratio Elenchi, “ignorance of refutation”): an irrelevant topic is presented in order to divert attention from the original issue. The basic idea is to “win” an argument by leading attention away from the argument and to another topic. Critically, a red herring is a deliberate attempt to change the subject or divert the argument. This is known formally in the English vocabulary as digression.

*Example:* “The opposition claims that welfare dependency leads to higher crime rates -- but how are poor people supposed to keep a roof over their heads without our help?”