Avoiding Logical Fallacies

One of the easiest ways to strengthen a paper that presents an argument is to free it from improper logical reasoning. Here's a list of commonly used yet fallacious types of argument to be sure to avoid.*

Reductio ad Absurdum/Slippery Slope: This type of argument assumes the truth of the opponent's position, and draws out the consequences of it being true, looking for a contradiction or an undesirable, absurd consequence. It is possible for this argument to be valid, but the fallacy occurs when the opponent's consequences become unrealistic.

Let's say we allow homosexuals to marry. Then we would also need to allow people to have multiple spouses. Then we'd need to allow people to marry dogs. Soon the institution of marriage will just be a joke.

Straw Man: An argument in which a weak, generally inaccurate version of an opposing viewpoint is presented as a means of strengthening one's own argument.

Opponents of the war say that we can just have tea with the terrorists and everything will be okay. Obviously, this is wrong, so we need to bomb Iraq.

False Dilemma: Also called a false dichotomy, this is an argument that falsely states or implies that only two options are available: the position being argued, or something undesirable.

If we don't teach people Christian values in schools, they will not learn morals. Therefore, we must teach people Christian values in schools.

Affirming the Consequent: This is a formally invalid argument of the form "If A, then B; B; therefore A." It confuses the idea that A can only be true when B is true for the idea that B can only be true if A is true.

If Iraq was supporting Al Qaeda, then Al Qaeda would have had enough money to attack us on 9/11. They had enough money to attack us, so Iraq was supporting Al Qaeda.

Denying the Antecedent: This is a formally invalid argument of the form "If A, then B; not A; therefore not B." It contains the incorrect assumption that B cannot be true if A is not true in cases where B must be true if A is true.

If I get hit with a Cruise missile, then I'll die. I won't get hit with a Cruise missile. Therefore, I won't die.

Circular Arguments: This is an argument in which the truth of the premises of the argument depends upon the truth of the very conclusion to which the premises lead.

The Bible is correct because it was divinely inspired. The Bible says that God exists. Therefore, since the Bible says that God exists and the Bible is correct, God exists.

Equivocating: This argument takes two terms that are different but that can be misconstrued as similar, and treats them as similar to prove a point.

Grand Valley says that a liberal education is important, but most of the people who go here are conservatives. Therefore, if we want to make the most people happy, we need to stop focusing on liberal education. ("Liberal" as it is used by political pundits is not what is meant by "liberal" in "liberal education", but this argument treats the two terms as if they mean the same thing.)

Ad Hominem: This is an argument where a point is made by attacking a person rather than the soundness of the argument that the person is making.

Michael Moore has pointed out that the Bush family has a financial relationship with the Bin Ladin

Family. However, Michael Moore is fat, and obviously dislikes the President, so we can disregard that fact

Appeal to the Populous: This form of argument involves an appeal to the popularity of an idea rather than the construction of a sound argument to support it.

Most people in America think that passing laws banning gay marriage doesn't amount to discrimination. Therefore, those laws aren't discriminatory.

Appeal to Authority: Students often use the fact that a noted authority made some statement, "X", as evidence for the proof of statement X. However, this is not a sound argument.

My professor in my class said that the war in Iraq is not going anywhere. Therefore, it obviously isn't going anywhere.

Appeal to Tradition: Often times, the fact that something has gone on for a long time is presented as evidence that it should go on.

There have been rich people and poor people throughout the entire history of the United States. Therefore, I don't see any reason to change the way the system runs.

Red Herring: An argument that brings attention a matter irrelevant to the actual topic in order to prove one's point about the topic at hand. This can be used very subtly, especially when distracting the audience with a matter that arouses strong emotion.

My opponents have stated that an invasion of Iraq would be a drastic misstep in the war on terror, but we must remember that 3000 people died on 9/11, and that the terrorist threat is ever-looming.

*The examples of this document are not written to offend. Rather, they serve solely as an example of what is often seen in essay writing.

