Common Logical Fallacies

An important way to evaluate the soundness of an argument is to examine its logic and, in particular, look for so-called logical fallacies that may lead writers' reasoning astray. Here are some of the most common logical fallacies.

Hasty Generalization: we frequently make a judgment about people after just meeting them. Or we conclude that a class is useless after attending a single session. All of these are generalizations based on insufficient evidence. Hasty generalizations might be true—the class might turn out to be useless—but you should always be wary of them, especially when talking about people.

<u>Example</u>: I've me three race car drivers today, and they were all rather aggressive. Clearly, race car drivers are all aggressive.

Ad Hominem: When arguments turn into shouting matches, they almost inevitably get personal. People shift away from the substance of an argument to attack the person making it.

<u>Example</u> Dr. Ralph's results are questionable. The man has 45 unpaid parking tickets. How can such an irresponsible citizen have produced good data?

Appeal to false authority: Finding support for a claim from an expert is a good move, but sometimes the authority we cite isn't really an expert on the subject.

<u>Example</u>: The TV show <u>The West Wing</u> stars Martin Sheen, who plays the President of the United States. The President has to know a lot about foreign policy; therefore, Martin Sheen is an excellent authority on negotiating trade agreements with other countries.

False Analogy: Analogies can be powerful comparisons in argument, but they can also lead us astray. If A and B are nothing alike, it would be illogical to compare them to make a point.

Example: People are like dogs; they respond best to clear discipline.

Post Hoc or False Cause: Just because one event happens before another, doesn't mean the first event caused the second. The connection may be coincidental, or some unknown third even may have caused it or even both.

Example: You used the phone, and it stopped working. You broke the phone.

Appeal to Popularity: This argues that since it is popular, it must be true

Example: We should see Rocky 27; we'll love it, as it was the most watched movie last week.

Slippery Slope: This fallacy is based on the fear that one step in a direction we don't like inevitably leads to the next step and the next with no stopping place.

<u>Example</u>: If you steal an eraser when you are six, you'll steal money by twelve and a car by sixteen, and then you'll be on death row for aggravated theft and murder by twenty-five.

Either/Or Fallacy: This happens when a complex, multi-sided issue is reduced to two positions without acknowledging the possibility of other alternatives

Example: America: love it or leave it.

Begging the Question/ Circular Reasoning: This occurs when you state your idea and then, usually after rewording it, you state it again as your reasoning.

Example: God exists because the Bible says so. The Bible was written by God.

Non Sequitur: This occurs when there is no evident connection between a claim and its reason. It does not logically follow. *Example*: I don't deserve a B for this course because I am a straight-A student.

Red Herring: this happens when you raise an unrelated or irrelevant point deliberately to throw the audience off track. Politicians use this frequently.

<u>Example</u>: You raise a good question about my support of companies' outsourcing jobs to find cheaper labor. Let me tell you about my admiration for the productivity of the American worker.

Poisoning the Well: This occurs when you create a situation or ask a question that impossible to really answer without looking bad in some light.

Example: When reading posts by atheists, remember that because they deny God, they also have no morals, so they simply can't be trusted