Logical Fallacies

Often during the course of constructing an argument, we fall into the trap of a logical fallacy. These mistakes in reasoning seriously affect our ability to argue effectively. Sometimes we fool ourselves into believing that a faulty argument is sound; other times we deliberately use a flawed argument for the sake of winning the battle. In any case, we should be aware that logical fallacies obscure the truth.

Use this list of logical fallacies to identify them in your writing and the writing of others.

1. **Begging the Question (or circular logic)** happens when the writer presents an arguable point as a fact that supports the argument. This error leads to an argument that goes around and around, with evidence making the same claim as the proposition. Because it is much easier to make a claim than to support it, many writers fall into this trap.

Example: "These movies are popular because they make so much money. They make a lot of money because people like them. People like them because they are so popular." The argument continues around in the logical circle because the support assumes that the claim is true rather than proving its truth.

2. **Non Sequitur arguments** don't follow a logical sequence. The conclusion doesn't logically follow the explanation. These fallacies can be found on both the sentence level and the level of the argument itself.

Example: "The rain came down so hard that Jennifer actually called me." Rain and phone calls have nothing to do with one another. The force of the rain does not affect Jennifer's decision to pick up the phone.

3. **Post Hoc, Ergo Propter Hoc** (after this, therefore also this) arguments, or **post hoc** for short, assume a faulty causal relationship. One event following another in time does not mean that the first event caused the later event. Writers must be able to prove that one event caused another event and did not simply follow in time. Because the cause is often in question in this fallacy, we sometimes call it a false cause fallacy.

Example: "Eating five candy bars and drinking two sodas before a test helps me get better grades. I did that and got an A on my last test in history." This arguer ignores other possible causes like how much he had studied and how easy the test was.

4. **Faulty Analogies** lead to faulty conclusions. Writers often use similar situations to explain a relationship. Sometimes, though, these extended comparisons and metaphors attempt to relate ideas or situations that upon closer inspection aren't really that similar. Be sure that the ideas you're comparing are really related. Also remember that even though analogies can offer support and insight, they can't prove anything.

Example: "Forcing students to attend cultural events is like herding cattle to slaughter. The students stampede in to the event where they are systematically 'put to sleep' by the program." While the analogy is vivid, the difference between cultural events and cattle slaughter is so vast that the analogy becomes a fallacy.

5. **Hasty Generalizations** base an argument on insufficient evidence. Writers may draw conclusions too quickly, not considering the whole issue. They may look only at a small group as representative of the whole or may look only at a small piece of the issue.

Example: Concluding that all fraternities are party houses because you have seen three parties at one fraternity is a hasty generalization. The evidence is too limited to draw an adequate conclusion.

6. **Red Herrings** have little relevance to the argument at hand. Desperate arguers often try to change the ground of the argument by changing the subject. The new subject may be related to the original argument, but does little to resolve it.

Example: "Winthrop should pave the lot behind Dinkins. Besides, I can never find a parking space on campus anyway." The writer has changed the focus of the argument from paving to the scarcity of parking spaces, two ideas that may be related, but are not the same argument.

7. **Equivocation** happens when the writer makes use of a word's multiple meanings and changes the meanings in the middle of the argument without really telling the audience about the shift. Often when we use vague or ambiguous words like "right," "justice," or "experience," we aren't sure ourselves what we mean. Be sure to know how you are using a word and stick with that meaning throughout your argument. If you need to change meanings for any reason, let your audience know of the change.

Example: When representing himself in court, a defendant said "I have told the truth, and I have always heard that the truth would set me free." In this case, the arguer switches the meaning of truth. In the

first instance, he refers to truth as an accurate representation of the events; in the second, he paraphrases a Biblical passage that refers to truth as a religious absolute. While the argument may be catchy and memorable, the double references fail to support his claim.

8. **Ignoring the Question** is similar to presenting a red herring. Rather than answering the question that has been asked or addressing the issue at hand, the writer shifts focus, supplying an unrelated argument. In this way, the writer dodges the real issues of the debate.

Example: During a press conference, a political candidate is asked a pointed, specific question about some potentially illegal fund-raising activity. Instead of answering the allegations, the candidate gives a rousing speech thanking all of his financial supporters. The speech was eloquent and moving, but shifted the focus from the issue at hand.

9. **Opposing a Straw Man** is a tactic used by a lot of writers because they find it easier to refute an oversimplified opposition. Writers may also pick only the opposition's weakest or most insignificant point to refute. Doing so diverts attention from the real issues and rarely, if ever, leads to resolution or truth.

Example: The debate over drink machines centers around cost and choice. Opponents of the new drink machines bring up their location as an important issue. This insignificant point has little relevance to the actual issues.

10. **Either—Or arguments** reduce complex issues to black and white choices. Most often issues will have a number of choices for resolution. Because writers who use the either-or argument are creating a problem that doesn't really exist, we sometimes refer to this fallacy as a **false dilemma**.

Example: "Either we go to Panama City for the whole week of Spring Break, or we don't go anywhere at all." This rigid argument ignores the possibilities of spending part of the week in Panama City, spending the whole week somewhere else, or any other options.

11. **Slippery Slopes** suggest that one step will inevitably lead to more, eventually negative steps. While sometimes the results may be negative, the slippery slope argues that the descent is inevitable and unalterable. Stirring up emotions against the downward slipping, this fallacy can be avoided by providing solid evidence of the eventuality rather than speculation.

Example: "If we force public elementary school pupils to wear uniforms, eventually we will require middle school students to wear uniforms. If we require middle school students to wear uniforms, high school requirements aren't far off. Eventually even college students who attend state-funded, public universities will be forced to wear uniforms."

12. **Bandwagon Appeals (ad populum)** try to get everyone on board. Writers who use this approach try to convince readers that everyone else believes something, so the reader should also. The fact that a lot of people believe it does not make it so.

Example: "Fifty million Elvis fans can't be wrong!" Of course they can. The merit of Elvis is not related to how many people do or do not like him or his music.

13. **False Authority** is a tactic used by many writers, especially in advertising. An authority in one field may know nothing of another field. Being knowledgeable in one area doesn't constitute knowledge in other areas.

Example: A popular sports star may know a lot about football, but very little about shaving cream. His expertise on the playing field does not qualify him to intelligently discuss the benefits of aloe.

14. **Ad Hominem (attacking the character of the opponent)** arguments limit themselves not to the issues, but to the opposition itself. Writers who fall into this fallacy attempt to refute the claims of the opposition by bringing the opposition's character into question.
These arguments ignore the issues and attack the people.

Example: Candidate A claims that Candidate B cannot possibly be an advocate for the working people because he enjoys the opera more than professional wrestling. Candidate B's personal entertainment preferences probably have little if anything to do with his stance on labor laws.

15. **Tu Quoque (you're another)** fallacies avoid the real argument by making similar charges against the opponent. Like ad hominem arguments, they do little to arrive at conflict resolution.

Example: "How can the police ticket me for speeding? I see cops speeding all the time."

This handout was developed by Scott Gilbert.