

Checking Your Arguments: 2

The kind of logic that is used in constructing an essay is not dependent on specialized learning or some esoteric technique. It is the kind of logic that normal people use every day in making decisions and in trying to persuade other people to share their opinions. But every word of a written argument is generally scrutinized very carefully by its readers, so special care is needed to keep logical fallacies from ruining the argument. By getting into the habit of searching the first draft of your papers for logical fallacies, you can not only improve your writing but also refine the logic that you use in everyday discussions and decisions.

Here is a check-list of some of the logical "fallacies" (or mistakes) that even good writers may easily fall into. The use of logical fallacies often results in faulty conclusions; it can lead people into terrible difficulties, not just in writing, but in making real-life decisions. A fallacy may, however, appear in an argument for a perfectly correct idea; it may, in that case, discredit even that correct idea—but it will certainly discredit the author.

Suppose, for instance, that someone argued that roses, like human beings, are living things, that there is a similarity between plants and people, and that, therefore, because all plants eventually die, we can expect that all people will eventually die, too. Now, it's perfectly true that all people will die; the problem is that the argument that is used to prove this (an argument by analogy) is so fallacious that it could never, in itself, establish the fact of human mortality.

If, then, you find a logical fallacy in your work, you should seriously examine your arguments to see if your whole thesis depends on your use of this fallacy and must therefore be discarded. But even if your thesis survives, you should find more logical ways of substantiating it. Logical fallacies are more easily discovered by the audience than by the writer, and they often lead an audience to reject even a writer's best ideas.

It's interesting to look for logical fallacies in one's own work, and it's delightful to find them in the works of others. The following is only a partial list. Your teaching assistant can help you to identify other fallacies and to find names for them. Most of the fallacies listed below can be called by a number of different names; call them anything you want, so long as you can recognize them when you see them.

Thirteen common fallacies:

1. "Ad hominem" ("to the man")

Ad hominem arguments use judgments of people's characters (or one side of their characters) to draw conclusions having little to do with their characters.

How do you expect a bankrupt like William Godwin to write correctly about economic theory?

If Joel were a more industrious student, he wouldn't argue that the grading policies in Humanities are too strict.

But there is no fallacy when the issue of a person's character can be shown to be relevant to the subject under discussion: "Tom lied about his debts at the racetrack; therefore, I think him capable of lying about his debts at the card room."

2. After it, therefore because of it ("post hoc, ergo propter hoc")

Helen changed her thesis after discussing it with Barbara; Barbara must have gotten her to change it.

The fallacy can be avoided by showing the causal connection between earlier and later events.

3. Analogy

Analogies are sometimes useful as illustration or decoration: "Southern Californians are lovers of luxury; like the ancient Romans, they love lying almost naked around swimming pools." They are seldom useful as substantial arguments:

Luxury-loving California, like luxury-loving Rome, will be destroyed by invading barbarians.

Many more points of similarity between California and Rome would have to be discovered before this could be made to look like a logical argument. This argument looks foolish because of its reference to a distant past that seems unlikely to recur. But what arguments have you heard on serious issues that make use of one-point analogies to "establish" a prediction or promote a policy?

4. Appeal to authority

Gandhi (or Professor John Doe, Harvard University) endorsed Thoreau's doctrine of civil disobedience; therefore we should endorse it.

Argument from authority can be powerful only when it can be shown that the authority has some special ability to judge the case at issue. Here, no reason has been advanced for accepting Gandhi's or Prof. Doe's special ability to judge this question; it would be easy to come up with similarly "authoritative" judgments on the other side of such a large matter for discussion. But the following kind of statement seems a justifiable appeal to authority: "Prof. John Doe, world's only researcher on the Cygnarian language, defines 'namblatt' to mean 'doorpost,' not 'potato chip,' which it had previously been thought to mean."

5. Appeal to a "perspective"

This fallacy is based on the assumption that one's membership in a particular group necessarily implies something, definite about the judgments one makes from one's "perspective."

As a student, I know what is wrong with college education.

As a business executive, she couldn't possibly understand the plight of Marine Corps recruits.

Since Austen's novels were written by a woman, they provide an accurate picture of the way women lived in her society.

No logical fallacy would lie in the statement that Austen, as a woman, might be well equipped to provide an accurate picture of women's lives. Whether she actually did so or not, however, is a separate question. Topic for discussion: How might this question be decided?

6. "A priori" arguments (arguments from assumed first principles)

Every argument relies on some assumed first principles; in a discussion about the Declaration of Independence, I can safely assume that the document exists--I need not prove its existence to anyone. A priori arguments become fallacious when they merely assume the validity of controversial positions that actually need to be supported with evidence.

Since every truly democratic government provides for its old people, Athens--which had no social security system--was not a democracy.

No reason has been stated for the controversial position that every truly democratic government does thus and so; it has merely been assumed a priori. The fallacy in this example is obvious; have you encountered subtler uses of a priori arguments that you could mention in class discussions?

7. Causes must resemble effects

It's enough that causes produce effects; one need not assume that causes resemble effects, as they are made to do in the following statements:

World War I was a great event; therefore, it could not have been caused by a little accident in Eastern Europe.

Her plan turned out to have bad effects; therefore, it was a bad plan and she is a bad person.

8. Demand for disproof

I've provided an explanation of the causes of World War I; you must accept it if you can't disprove it.

We needn't accept everything that anyone tells us, just because we can't absolutely and immediately disprove it. It would be

hard to disprove the claim that there are odorless, noiseless, invisible people in this room; but I need not believe that there are, simply because I can't disprove it. The question in this case is, how good are the arguments for the existence of these invisible people?

9. False alternatives

She's either a democratic leader or a mere fanatic.

Maybe she's both; maybe she's neither.

10. Invidious or laudatory definition

Many people believe (erroneously) that if they can define something so as to make it look bad or good, they don't need to find any evidence supporting their opinion.

It was not surprising that he refused to give money for the children's hospital; he was a capitalist, a robber baron living by mere greed.

As a capitalist, a producer of wealth, her life was dedicated to the good of the community.

11. "Isolated fact" or "Moscow subway" fallacy

Visitors to the Soviet Union often used to say that the Soviet economic system had been unfairly criticized, because

Any country that can build the Moscow subway must be doing all right.

This ranks in logical force with the common idea that

Any country that can put a man on the moon can also conquer cancer.

Large statements--e.g., about a nation's powers and abilities--need more than one fact to back them up.

12. Near it (or them), therefore like it (or them)

In the eighteenth century most people in America were Christians; therefore, we can assume that Jefferson and Franklin were Christians.

But although Jefferson and Franklin believed in God, they weren't Christians.

13. Possibility, therefore probability

It's possible to explain the American Revolution as an attempt by wealthy Americans to avoid repaying debts to the English; therefore, I will treat it as such [without finding additional evidence for so doing].

Like other fallacies, this is an illegitimate shortcut. Much more evidence is required to establish a probability than to establish a mere possibility.