

X

Fallacies

Fallacies are mistakes, errors in arguments. Many of them are so tempting, and therefore so common, that they even have their own names. This may make them seem like a separate and new topic. Actually, however, to call something a fallacy is usually only another way of saying it violates one of the rules for *good* arguments. The fallacy of “false cause,” for example, is simply a questionable conclusion about cause and effect, and you can look to Chapter V for explanation.

To understand fallacies, then, you need to understand what rules they break. This chapter begins by explaining two very general fallacies, referring them back to a number of rules in this book. Following that is a directory and explanation of a number of specific fallacies, including their Latin names when frequently used.

The Two Great Fallacies

(1) One of our most common errors is to draw conclusions from too little evidence. If the first Lithuanian I meet has a fiery temper, I expect the *all* Lithuanians have fiery tempers. If one ship disappears in the Bermuda Triangle, the *National Enquirer* concludes that the Bermuda Triangle is haunted. This is the fallacy of *generalizing from incomplete information*.

It is easy to see this error when others make it, harder to see it when we do it ourselves. But consider how many of the rules in Chapters II-VI are directed against this mistake. Rule 8 requires more than one example: you can not draw a conclusion about the entire student body of your college based on yourself and your roommate. Rule 9 requires representative examples: you cannot draw a conclusion about the entire student body of a college based on your student friends, even if you have a lot of them. Rule 10 requires background information: if you draw a conclusion about the student body of your college based on a sample of 30 people, you must also consider how big the student body is (30? 30,000?). Arguments from authority require that the *authority* not overgeneralize: he or she must have the information and the qualifications to justify the judgement you quote. Rule 19 points out that *a* cause is not necessarily *the* cause of an event. Don't overgeneralize from the fact that you have found *a* cause: other causes may be more likely.

(2) **A second common fallacy is *overlooking alternatives*.**

Section 20-23 pointed out that just because events **A** and **B** are correlated, it does not follow that **A** causes **B**. **B** could cause **A**; something else could cause *both* **A** and **B**; **A** may cause **B** and **B** may cause **A**; or **A** and **B** might not even be related. These alternative explanations may be overlooked if you accept the first explanation that occurs to you. Don't rush; there are usually many more alternative explanations than you think.

For example, consider one more argument about causes:

A good way to avoid divorce is make love frequently, because figures show that spouses who make love frequently seldom seek divorce.

Frequent love-making is correlated with staying married, and is therefore supposed to be the *cause* (or *a* cause) of staying married. But staying married may also lead to frequent love-making. Or something else (love and attraction!) may cause frequent love-making and staying married. Or each may cause the other. Or possibly making love and staying married are not even related!

We also often overlook alternatives when we are trying to make decisions. Two or three options stand out, and we weigh only these. In his famous essay "Existentialism Is a Humanism," philosopher Jean-Paul Sartre tells of a student of his, during the Nazi occupation of France in World War II, who had to choose between making a risky voyage to England to fight with the Free French and staying with his mother in Paris to look after her. Sartre paints the picture as if the young man must either stake everything on a flight to England and thus totally abandon his mother, or else commit himself entirely to her and give up any hope of fighting the Nazis. But surely there are other possibilities. He could stay with his mother and still work for the Free French in Paris; he could stay with his mother for a year and try to ensure her position, gradually making it possible to leave. And are we to think of his mother as completely dependent and graspingly selfish or is she perhaps a little patriotic and possibly self-sufficient too? Very likely, then, there are other options.

On ethical issues too we tend to overlook alternatives. We say that either the fetus is a human being with all the rights that you and I have, or else it is a lump of tissue with no moral significance at all. We say that either every use of animal products is wrong, or all of the current uses are acceptable. And so on. Again, however, there are surely other possibilities. Try to increase the number of options you consider, not narrow them!

Directory of the Fallacies

ad hominem: attacking the *person* of alleged authority rather than his or her qualifications. See rule 17.

ad ignorantiam (appeal to ignorance): arguing that a claim is true just because it has not been shown to be false. A classic example is this statement by Senator Joseph McCarthy, when asked for evidence to back up his accusation that a certain person was a communist:

I do not have much information on this except the general statement of the agency that there is nothing in the files to disprove his communist connections.

This is an extreme example of “arguing” from *incomplete information*: here there is simply no information at all.

ad misericordiam (appeal to pity): appealing to pity as an argument for special treatment.

I know that I flunked every exam, but if I don't pass this course, I'll have to retake it in the summer school. You *have* to let me pass!

ad populum: appealing to the emotions of a crowd. Also, appealing to a person to “go along” with the crowd. E.g.: “Everyone's doing it!” **Ad populum** is a good example of a *bad* argument from authority: no reasons are offered to show that “everybody” is an informed or impartial source.

affirming the consequent: a deductive fallacy of the form:

If **p** then **q**.
q
 Therefore, **p**.

For example:

If the roads are icy, the mail is late.
 The mail is late.
 Therefore, the roads are icy.

Both premises could be true and the conclusion still false. Although the mail *would* be late if the roads were icy, it may also be late for other reasons. The argument *overlooks alternative explanations*. Notice that this fallacy resembles modus ponens; take care!

begging the question: implicitly using your conclusion as a premise.

God exists because it says so in the Bible, which I know is true because God wrote it, after all!

To write this argument in premise-and-conclusion form, you'd have to write:

The Bible is true, because God wrote it.
 The Bible says that God exists.
 Therefore, God exists.

To defend the claim that the Bible is true, the arguer claims that God wrote it. But, obviously, if God wrote the Bible, He exists. Thus the argument *assumes* just what it is trying to prove.

complex question: posing a question or issue in such a way that a person cannot agree *or* disagree with you without committing him- or herself to some other claim you wish to promote. Simple example: “Are you still as self-centered as you used to be?” Answering either “yes” or “no” commits you to agreeing that you used to be self-centered. More subtle example: “Will you follow your conscience, instead of your pocketbook, and donate to the cause?” Anyone who says “no,” regardless of his or her real reasons for not donating, is made to feel ignoble; anyone who says “yes,” regardless of his or her real reasons for donating, is made to feel noble. If you want a donation, just ask for a donation.

composition: assuming that a whole must have the properties of its parts, e.g. “Since the members of the team are fine athletes, the team must be a fine team.” Even fine athletes may work poorly together. Opposite of **division**.

denying the antecedent: a deductive fallacy of the form:

If **p** then **q**.
Not-**p**.
Therefore, Not-**q**.

For example:

If the roads are icy, the mail is late.
The roads are not icy.
Therefore, the mail is not late.

Both premises could be true and the conclusion still false. The mail may be late for other reasons besides icy roads. The argument *overlooks alternative explanations*. Notice that this fallacy resembles modus tollens; take care!

division: assuming that parts of a whole must have the properties of the whole, e.g. “Since this is a fine team, the members of the team must be fine athletes.” A group of players may work together effectively without being outstanding individual players. Opposite of **composition**.

equivocation: using a single word in more than one sense: see rule 7.

false cause: generic term for a questionable conclusion about cause and effect. Turn to rules 20-23 and try to figure out specifically why the conclusion is (said to be) questionable.

false dilemma: reducing the options you consider to just two, often sharply opposed and unfair to the person against whom the dilemma is posed, e.g., “America: Love it or Leave it.” Here is a more subtle example from a student paper: “Since the universe could not have been created out of nothingness, it must have been created by an intelligent life-force...” Is creation by an intelligent life-force the only other possibility? Arguing from a false dilemma is sometimes a way of not playing fair: it also, obviously, overlooks alternatives.

loaded language: see rule 5.

non sequitur: drawing a conclusion that “does not follow”: i.e., a conclusion that is not a reasonable inference from the evidence. Very general term for a bad argument. Try to figure out specifically what is (supposed to be) wrong with the argument.

the “person who” fallacy: see rule 10.

persuasive definition: defining a term in a way which appears to be straightforward but which in fact is subtly loaded, e.g., Ambrose Bierce, in *The Devil’s Dictionary*, defines “faith” as “belief without evidence in what is told by one who speaks without knowledge, of things without parallel.” Persuasive definitions may be favorably loaded too: e.g., defining “conservative” as “someone with a realistic view of human limits.”

petitio principii: Latin for **begging the question**.

poisoning the well: using **loaded language** to disparage an argument before even mentioning.

I’m confident that you haven’t been taken in by those few holdouts who still haven’t outgrown the superstition that...

More subtle:

No sensitive person thinks that...

post hoc, ergo propter hoc (literally, “after this, therefore because of this”): assuming causation too readily on the basis of mere succession in time. Again a very general term for what Chapter V tries to make precise. Turn to Chapter V and try to figure out specifically why the argument assumes causation too readily.

provincialism: mistaking a local fact for a universal one. I have heard it seriously argued, for instance, that eating three meals a day is a universal human behavior.

red herring: introducing an irrelevant or secondary subject and thereby diverting attention from the main subject. Usually the red herring is an issue about which people have strong opinions, so that no one notices how their attention is being diverted. In a discussion of the relative safety of different makes of a car, for instance, the issue of which cars are made domestically and which are imported is a red herring.

straw man: caricaturing an opposing view so that it is easy to refute: see rule 5.

suppressed evidence: presenting only the *part* of a piece of evidence that supports your claim while ignoring the parts that contradict your claim, e.g., excerpting just the phrase “you must go to *Flames and Glory*” from a movie review which actually said “if you must go to *Flames and Glory*, take a book.” Don’t laugh: it happens.

weasel word: changing the meaning of a word in the middle of your argument, so that your conclusion can be maintained, though its meaning may have shifted radically. Usually a maneuver performed under the pressure of counterexample.

A: All studying is torture.

B: What about studying argument: you love that!

A: Well, that is not really studying.

Here studying is the weasel word. **A**'s response to **B**'s objection is in effect changes the meaning of "studying" to "studying with torture": so **A**'s first statement remains true, but only at the cost of becoming trivial ("All studying which is torture is torture."). See also the discussion of "selfish" in section 7.