

INFORMAL FALLACIES

Fallacy: A defect in an argument's reasoning that consists of something other than merely false premises. An oft-repeated pattern of faulty reasoning (where premises fail to support the conclusion).

Formal fallacy: Are identified purely by the argument's form (Ex., affirming the consequent, etc.)

Informal fallacy: Detected only through the analysis of the content of argument

I. **Fallacies of Relevance:** premises aren't logically, but may be psychologically relevant to conclusion

1. **Appeal to force** (Argument ad baculum: Appeal to the "stick"): When one appeals to force or threat of force (either physical or psychological) in order to cause acceptance of a conclusion.

ex.- "I deserve a raise, after all it'd be a shame if your wife found out where you really were last weekend."

2. **Appeal to Pity**-(Argument ad misericordiam): An attempt to support a conclusion by merely evoking pity.

ex.- "I admit I declared my 6 dogs as dependents on my taxes, but if you find me guilty, my reputation will be ruined...I'll lose my job, and my kids will starve."

3. **Appeal to the People** (Argument ad populum): Directing an emotional appeal "to the people" to win their assent to a conclusion unsupported by good evidence.

Direct approach: Exciting emotions of a crowd to win acceptance of conclusion (arouse mob mentality)
Ex. politicians

Indirect approach: Aim appeal to 1 or more individuals separately, focusing on some aspect of their relationship to the crowd

1. bandwagon arg: you'll be left out if don't join the crowd
Ex. Of course you want to buy Crest...90% of American's use it
2. appeal to vanity: associating a product with someone admired, pursued, imitated, etc, with idea that you will be too
Ex. Selling of exercise equipment, etc.
3. appeal to snobbery: similar to appeal to vanity...
Ex. Only those of high class will drive a Lexus, Jaguar, etc.

4. **Argument against the person** (Argument ad hominem): instead of directing attention against argument, direct attention to person making argument.
3 types:
 1. Ad hominem abusive: verbally abusing the person (not responding to argument)
Ex., “Her argument for capital punishment is ridiculous. Why should anyone listen to a whisky-swilling, unemployed deadbeat mom anyway?”
 2. Ad hominem circumstantial: attempt to discredit opponents argument by alluding to certain circumstances that affect the opponent
Ex., “Of course he wants an increase in the low income housing budget, he grew up in the inner city.”
 3. Tu quoque (“you too”): accusing opponent of bad faith / hypocrisy
Ex., “How dare you say I shouldn’t smoke. You used to smoke yourself.”
5. **Accident**: When a general rule is applied to a specific case it wasn’t intended to cover.
Ex., “Freedom of speech is constitutionally guaranteed, therefore Mr. Smart shouldn’t be arrested for his speech that incited that riot last week.”
6. **Straw Man**: Distorting opponent’s position in order to more easily refute it
Ex., “Mr. Smith has argued against reciting the pledge of allegiance in schools. Obviously, Mr. Smith advocates atheism. Atheism leads to the suppression of all religions and the replacement of God by an omnipotent state. I don’t think we want that for our country. Clearly, Mr. Smith’s argument is nonsense.”
7. **Missing the point** (Ignoratio Elenchi): Occurs when the premises of an argument support one particular conclusion, but then a different conclusion is drawn
Ex., “Abuse of the welfare system is rampant these days. Our only alternative is to abolish the system.”

II. Fallacies of Weak Induction: These arguments fail not because the premises aren’t logically relevant to the conclusion, but because the connection between the premises and conclusion isn’t strong enough to support the conclusion. The premises may provide some (but not adequate) support for the conclusion.

1. **Appeal to unqualified authority** (Argument ad verecundiam): When an authority is appealed to concerning matters outside his area of expertise, or is untrustworthy (biased, prejudiced, has motive to lie, or has inability to perceive, remember).
Ex., Use of celebrities to sell underwear, toothpaste, shampoo, food, etc.

2. **Appeal to ignorance (Argument ad ignorantiam)**: Whenever it's argued that something is true (or false) just because it hasn't (yet) been proven otherwise
Ex., "Ghosts exist, since no one has proven they don't exist."

3. **Hasty generalization (converse accident)**: When one uses only unusual or atypical cases & generalizes to a rule that fits them alone
Ex., "My alternator went out on my Ford Tempo, and so did my friend's.
Therefore, All Ford cars must have faulty alternators."

4. **False Cause**: Occurs when link between premises & conclusion depends on some imagined causal connection that probably doesn't exist
Ex., "Every time I wear my purple shirt I do well on my exams. Therefore, if I want to get an A on tomorrow's exam, I have to wear my purple shirt."

5. **Slippery slope**: Occurs when conclusion of an argument rests upon an alleged chain reaction for which there's insufficient reason to think will take place --implies that something rests on a "slippery slope"....one step in wrong direction will lead to slide all the way to bottom
Ex., "If we don't severely punish students found intoxicated at the prom, then the next thing you know students will think they can show up drunk to class, they'll start keeping alcohol in their lockers, and pretty soon we'll even start allowing bars on school grounds."

III. Fallacies of Presumption: Fallacies that rest on false presumptions:

1. **Begging the Question** (petitio principii): When one assumes as a premise the very conclusion he/she is trying to prove. Arguing in a circle.
Ex., Premise: The government with strong aristocratic leadership is the best.
Conclusion: Therefore, aristocracy is the best kind of government.

2. **Complex Question**: Questions to which a simple "yes"/ "no" answer do not apply. Is actually made up of 2 or more questions, one of which is presupposed to have already been answered
Ex., "Have you stopped cheating on exams?"

3. **False Dichotomy** (either-or fallacy): When a premise presents 2 alternatives as if there were no other possible alternative (3rd., 4th., etc.)
Ex., "Either go to college, or you'll become a bum."

IV. Fallacies of Ambiguity: Arise from some form of ambiguity in premise(s), conclusion, or both. A statement is ambiguous if it's susceptible to different interpretations.

1. **Equivocation:** When the conclusion of an argument depends on a word or phrase being used in 2 different senses
Ex., Some triangles are obtuse. Whatever is obtuse is ignorant. So, some triangles are ignorant.
2. **Amphiboly:** When arguer misinterprets a statement that's syntactically ambiguous & then draws a conclusion based on this ambiguity
syntactic ambiguity: usually arises from mistake in grammar or punctuation (missing comma, etc.)
Ex., "Professor Jones will give a lecture about heart failure in the biology lecture hall. It must be the case that a number of heart failures have occurred there recently."

V. Fallacies of grammatical analogy: Arguments that are similar in structure to other arguments that aren't fallacious.

1. **Composition:** When it's illegitimately argued that because the parts have a certain attribute, then the whole must also have this attribute
Ex., "Everyone on the team is an excellent athlete. Therefore, the team as a whole must be excellent."
2. **Division:** Exact reverse of composition fallacy. Division argues from whole to parts. When conclusion of argument depends on erroneous transfer of an attribute from a whole (or class) onto its parts (members).
Ex., "This jigsaw puzzle, when assembled, is circular. Therefore, each individual piece of the puzzle is circular in shape."

This explanation and list of common informal fallacies was put together with the help of two textbooks in particular: Irving M. Copi's *Introduction to Logic*, and Patrick J. Hurley's *A Concise Introduction to Logic*. Both of these textbooks are often considered mainstays in their explanations of the informal fallacies.