

Logical Fallacies

Errors of reasoning or proof.

Logical Fallacies are...

Errors of reasoning.

Manipulative.

Propaganda.

Used when the topic is not fully understood.

Used when the proof does not really support the claim.

Used to distract audiences from the real issue.

Logical Fallacies are not...

- Errors of fact.
- Typos.
- Useful for research or proving anything.
- Sophisticated or credible.

Most common fallacies:

- Appeal to authority
- Bandwagon
- Hasty generalization
- Red Herring
- Begging the question
- Ad Hominem
- Slippery slope
- Post hoc
- Straw man
- Faulty equivocation

Appeal to Authority

- Person in question does not have proper credentials to make an expert opinion.

Bill and Jane are arguing about the morality of abortion:

Bill: "I believe that abortion is morally acceptable. After all, a woman should have a right to her own body."

Jane: "I disagree completely. Dr. Johan Skarn says that abortion is always morally wrong, regardless of the situation. He has to be right, after all, he is a respected expert in his field."

Bill: "I've never heard of Dr. Skarn. Who is he?"

Jane: "He's the guy that won the Nobel Prize in physics for his work on cold fusion."

Bill: "I see. Does he have any expertise in morality or ethics?"

Jane: "I don't know. But he's a world famous expert, so I believe him."

Lead a country: maybe. Fly a plane—nope!



Ad Hominem

- A personal or irrelevant attack is made upon a person trying to discredit what s/he says.

Bill: "I believe that abortion is morally wrong."

Dave: "Of course you would say that, you're a priest."

Bill: "What about the arguments I gave to support my position?"

Dave: "Those don't count. Like I said, you're a priest, so you have to say that abortion is wrong. Further, you are just a lackey to the Pope, so I can't believe what you say."

I don't believe anyone
that looks like that!



Bandwagon/Popular Opinion

- The threat of rejection from peers is substituted for real evidence.

Bill: "Those Duke Lacrosse players are guilty of raping that woman!"

Jill: "How do you know?"

Bill: "It's all over the news."

The three finger rule!



Slippery Slope

- The assertion that one event will lead to another, and usually discounts many steps in between.

"Marijuana is a gateway drug. Users will soon be addicted to crack and heroin and will probably die of overdose."

War on drugs—but why?



Hasty Generalization

- Drawing a conclusion without a sufficient amount of evidence/research.

Sam is driving on I-95, minding her own business. A station wagon is in the far left lane going well under the speed limit. As Sam moves to pass on the right the slow car suddenly changes lanes and almost sideswipes Sam. As Sam goes by, she sees that the car has Ohio plates and concludes that all Ohioans can't drive.

Snowbird driving?



Association is Causation/Post Hoc

- A.K.A. Faulty Cause and Effect
- Assuming that one event caused another event merely because they have a correlation (are associated).

The picture on Jim's old TV set goes out of focus. Jim goes over and strikes the TV soundly on the side and the picture goes back into focus. Jim tells his friend that hitting the TV fixed it.

Red Herring

- An irrelevant topic is presented to distract or avoid current question or debate.

Teacher: Why didn't you do your homework?

Student: Today was a mess for me. Traffic was bad. I got a speeding ticket. My kid got suspended from school...

Straw Man

- Taking an actual position and substituting and distorting that position to misrepresent it.

"Senator Jones says that we should not fund the attack submarine program. I disagree entirely. I can't understand why he wants to leave us defenseless like that."

[The straw man is the position of leaving us defenseless yet it is never said.]

We were attacked because of our the way our culture displays our indulgent lifestyle.



Circular Reasoning

A.K.A. Begging the Question

A premise's conclusion is assumed to be true before actually proving it.

Bill: "God must exist."

Jill: "How do you know."

Bill: "Because the Bible says so."

Jill: "Why should I believe the Bible?"

Bill: "Because the Bible was written by God."

Religious Appeals

Religion is a set of beliefs and is based on faith and therefore cannot be logically proven either way. It either "preaches to the choir" or turns off audiences.

- Limit the use of sacred texts
- Religion makes audiences nervous
- Religion and/or morals are NOT universal

Faulty Equivocation

- Creating an either/or relationship when the issue is much more complex.

The term "Axis of Evil" implies that Coalition forces are "good," but these terms simplify a global difference in perspective and motivation at the country level.

Logical Fallacies

- Are present everywhere communication exists.
- Are used to persuade audiences.
- Are used by politicians.
- Help comedians make a satirical point.
- Allow religions to control population.
- Effect only unaware audiences.

Learn to identify logical fallacies to

- Be a more informed voter.
- Avoid getting scammed.
- Better analyze "texts."
- Communicate more effectively.
- Make better decisions.

Forming a Good Argument

- Base it on positive statements that include facts.
- Recognize the difference between your facts and opinions.
- DATA... DATA... DATA...