Logical Fallacies - 1



An argument that contains a mistake in reasoning

Fallacies of Relevance



Mistakes in reasoning that occur because the premises are logically irrelevant to the conclusion

Relevance

 A <u>statement</u> is relevant to another statement if it provides at least some reason for thinking that the second statement is true or false

Positive Relevance



A statement that counts in favor to another statement

Negative Relevance



A statement that counts against another statement

Logical Irrelevance



A statement that counts neither for or against another statement

: Example

The earth revolves around the sun. Therefore, marijuana should be legalized

Fallacies

Personal Attack (Ad Hominem)

Definition

Rejecting someone's argument or claim by attacking the other person rather than the person's argument or claim

: Example

Hugh Hefner, founder of Playboy magazine, has argued against censorship of pornography. But Hefner is an immature, self-indulgent millionaire who never outgrew the adolescent fantasies of his youth. His argument, therefore, is worthless.

Attacking the Motive

Definition

The error of criticizing a person's motivation for offering a particular argument or claim, rather than examining the worth of the argument or claim itself.

: Example

Professor Michaelson has argued in favor of academic tenure. But why should we even listen to Professor Michaelson? As a tenured professor, of course he supports tenure.

This attack may not always be fallacious

Common Patterns

- X is biased or has questionable motives.
- Therefore, X's argument or claim should be rejected.

Look Who's Talking (Tu Quoque)



An arguer rejects another person's argument or claim because that person fails to practice what he preaches

: Example

Doctor: You should quit smoking.

Patient: Look who's talking! I'll quit when you do, Dr. Smokestack!

This is different than pointing out hypocrisy, which is not a fallacy

Common Patterns

- X fails to follow his or her own advice
- Therefore, X's claim or argument should be rejected

Two Wrongs Make a Right

Definition

When an arguer attempts to justify a wrongful act by claiming that some other act is just as bad or worse.

: Example

I don't feel guilty about cheating on Dr. Boyer's test. Half the class cheats on his tests

Scare Tactics

Definition

When an arguer threatens harm to a reader or listener if he or she does not accept the arguer's conclusion and this threat is irrelevant to the truth of the arguer's conclusion

:≡ Example

Diplomat to diplomat: I'm sure you'll agree that we are the rightful rulers of the San Marcos Islands. It would be regrettable if we had to send armed forces to demonstrate the validity of our claim.

- Not all threats involve fallacies
 - For example
 - Parent to teen: If you come home late one more time, your allowance will be cut

Appeal to Pity

Definition

When an arguer inappropriately attempts to evoke feelings of pity or compassion from his listeners or readers.

: Example

Student to professor: I know I missed half your classes and failed all my exams, but I had a really tough semester. First my pet boa constrictor died. Then my girlfriend told me she wants a sex-change operation. With all I went through this semester, I don't think I really deserved an F. Any chance you might cut me some slack and change my grade to a C or a D?

Not fallacious when an emotional appeal is relevant and logically makes sense

Bandwagon Argument

Definition

Plays on a person's desire to be popular, accepted, or valued, rather than appealing to logically relevant reasons or evidence.

: Example

All the really cool kids at East Jefferson High School smoke cigarettes. Therefore, you should, too.

Common Patterns

- Everybody (or a select group of people) believes or does X
- Therefore, you should believe or do X, too

Straw Man

Definition

When an arguer distorts an opponent's argument or claim to make it easier to attack

:≡ Example

Senator Biddle has argued that we should outlaw violent pornography. Obviously, the senator favors complete governmental censorship of books, magazines, and films. Frankly, I'm shocked that such a view should be expressed on the floor of the U.S. Senate. It runs counter to everything this great nation stands for. No senator should listen seriously to such a proposal.

Logical Pattern

- 1. X's view is false or unjustified (but where X's view has been unfairly characterized or misrepresented)
- 2. Therefore, X's view should be rejected

Red Herring

Definition

When an arguer tries to sidetrack his audience by raising an irrelevant issue and then claims that the original issue has effectively been settled by the irrelevant diversion

: Example

Many people criticize Thomas Jefferson for being an owner of slaves. But Jefferson was one of our greatest presidents, and his Declaration of Independence is one of the most eloquent pleas for freedom and democracy ever written. Clearly, these criticisms are unwarranted.

- Very common in politics
- Different than just evading the issue, which on its own is not a fallacy

Equivocation



When a key word is used in two or more senses in the same argument and the apparent success of the argument depends on the shift in meaning

:≡ Example

I distinctly heard Mo say, "Hit me," as he was playing cards in Las Vegas. To hit someone is to slug them. So, Mo must enjoy being slugged.

Often appears valid but isn't due to the differences in meaning

Begging the Question

Definition

When an arguer states or assumes as a premise the very thing he or she is trying to prove as a conclusion

- Two ways to commit this fallacy
 - Simply restating the conclusion in slightly different words
 - Circular reasoning

∃ Example

- Bungee-jumping is dangerous because it's unsafe
- Kylie: God wrote the Bible.
 - Ned: How do you know?
 - Kylie: Because it says so in the Bible, and what the Bible says is true.
 - Ned: How do you know what the Bible says is true?
 - Kylie: Because God wrote the Bible.

Example 5.2 Swirlies

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- (1) Bandwagon
- (4) Straw man
- (7) Begging the question
- (10) Two wrongs make a right
- (13) Equivocation
- (16) No fallacy

- (19) No fallacy
- (22) Straw man
- (25) Red herring
- (28) Attacking the motive
- (31) Bandwagon
- (34) Bandwagon
- (37) Red herring
- (40) No fallacy