

Basic Logical Fallacies & How to Spot Them

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AICE Thinking Skills

Logical Fallacy

- A **logical fallacy** – or **fallacy** for short – is an argument that contains a mistake in reasoning.
- **Fallacies of relevance** are mistakes in reasoning that occur because the premises are *logically irrelevant* to the conclusion.
- **Fallacies of insufficient evidence** are mistakes in reasoning that occur because the premises, though logically relevant to the conclusion, *fail to provide sufficient evidence* to support the conclusion.

The Concept of Relevance

- A statement is **relevant** to another when *it provides at least some evidence or reason* for thinking that the second statement is true or false.
- A statement can be either
 - **Positively relevant**
 - **Negatively relevant**
 - **Logically irrelevant**

Positive Relevance

- A statement is **positively relevant** to another statement if it counts *in favor of* that statement.
 - **Labradors are dogs. Dogs are domestic animals, So Labradors are domestic animals.**
 - **Most FIU students live off-campus. Annie is an FIU student. So probably Annie lives off-campus.**
 - **Chris is a woman. Therefore, Chris enjoys knitting.**
- Each of the premises is positively relevant to the conclusion.

2 Important Points about Relevance

- A statement can be relevant to another statement even if the first statement is completely false.
 - Dogs are cats. Cats are felines. So dogs are felines.
- Whether a statement is relevant to another usually depends on the *context* in which the statement is made.
 - A) All dogs have five legs. B) Rover is a dog. So C) Rover has five legs.
 - A is positively relevant to C only because of B

Negative Relevance

- A statement is **negatively relevant** to another if it counts *against* that statement.
 - Marty is a high-school senior. So Marty likely has a Ph.D.
 - Althea is two years old. So Althea probably goes to college.

Logical Irrelevance

- A statement is **logically irrelevant** to another statement if it counts *neither for nor against* that statement.
 - The earth revolves around the sun. Therefore, marijuana should be legalized.
 - Last night I dreamed that the Dolphins will win the Super Bowl. Therefore, the Dolphins will win the Super Bowl.
 - A tomato is technically a fruit. Therefore, life is meaningless.

Fallacies of Relevance

These occur when an arguer offers reasons that are logically irrelevant to his or her conclusion:

- Personal Attack (**Ad Hominem**)
- Attacking the Motive
- Look Who's Talking (**Tu Quoque**, /tu kwoukwε/)
- Two Wrongs Make a Right
- Scare Tactics
- Appeal to Pity
- Bandwagon Argument
- Straw Man
- Red Herring
- Equivocation
- Begging the Question

Personal Attack (Ad Hominem)

- Rejects someone's argument or claim by attacking the person rather than the person's argument or claim.
 - a) X is a bad person.
 - b) Therefore, X's argument must be bad.

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.

Hugh Hefner is a bad person.

Therefore, Hugh Hefner's argument must be bad.

Personal Attack (**Ad Hominem**)

- The fallacy of personal attack occurs only if
 - 1) An arguer *rejects another person's argument or claim,*
 - AND**
 - 2) The arguer *attacks the person who offers the argument or claim,* rather than considering the merits of that argument or claim.

Personal Attack (Ad Hominem)

- *Not all personal attacks are fallacies!!!*
 - Millions of innocent people died in Hitler's ruthless genocidal purges. Clearly Hitler was one of the most brutal dictators of the twentieth century.
 - Ms Fibber has testified that she saw my client rob the Bank. But Ms Fibber has twice been convicted of perjury. In addition, you've heard her own mother testify that she is a pathological liar. Therefore, you should not believe Ms. Fibber's testimony against my client.

In these cases, the personal attacks are relevant to the conclusion so no fallacy is committed.

Attacking the Motive

- An arguer criticizes a person's motivation for offering a particular argument or claim, rather than examining the worth of the argument or claim itself.
 - a) X is biased or has questionable motives.
 - b) X's argument or claim should be rejected.

Examples:

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

Senator Pork supports the stimulus package. Representing a state that will get a new bridge, of course he supports it.

BUT

- ‘Burton Wexler, spokesperson for the American Tobacco Growers Association, has argued that there is no credible scientific evidence that cigarette smoking causes cancer. Given Wexler’s obvious bias in the matter, his arguments should be taken with a grain of salt.’
- This argument reflects a common sense assumption that the arguments put forward by Mr. Wexler need to be scrutinized with particular care. *It is not a fallacy of attacking the motive.*
- Note the difference between saying “this person is wrong” and “this person’s argument should be examined closely due to a possible bias.”

Look Who's Talking (Tu Quoque /tu kwoukwε/)

- An arguer rejects another person's argument or claim because that person *fails to practice* what he or she preaches.
 - a) X fails to follow his or her own advice.
 - b) Therefore, X's claim or argument should be rejected.

Examples:

Doctor: You should quit smoking.

Patient: Look who's talking! I'll quit when you quit.

Parent: I don't want you to smoke marijuana.

Son: But you told me that you did when you were my age.

BUT

- *Jim:* Our neighbor Joe gave me a hard time yesterday about washing my car during this drought emergency.

Patti: Well, he's right. But I wish that hypocrite would follow his own advice. Just last week I saw him watering his lawn in the middle of the afternoon.

- Patti is not rejecting any argument by the neighbor, so *no fallacy is committed*.

Two Wrongs Make a Right

- An arguer attempts to justify a wrongful act by claiming that some other act is just as bad or worse.
(“Whataboutism” could be considered a form of this)
 - a) Others are committing worse or equally bad acts.
 - b) Therefore my wrongful act is justified.

Examples:

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

Why pick on me, officer? Nobody comes to a complete stop at that stop sign.

Mom: Kaia, stop hitting your sister.

Kaia: Well, she pinched me.

BUT

- Are these cases of '2 Wrongs Make a Right?'
 - *Umpire: Why did you throw at the batter's head?*
Pitcher: Because he threw at three of our players. I have an obligation to protect my teammates if you guys don't.
 - Jeff Dahmer murdered seventeen men in cold blood. Therefore, Jeff Dahmer should be put to death.

They commit the fallacy of '2WMR' only if the justification is insufficient to warrant the apparent wrong-doing – debatable!

Scare Tactics

- An arguer threatens harm to the reader / listener and this threat is irrelevant to the truth of the arguer's conclusion.
 - *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.
 - *Gun lobbyist to politician*: This gun-control bill is wrong for America, and any politician who supports it will discover how wrong they were at the next election.
 - Every time someone says they don't believe in fairies, somewhere out there a fairy dies a horrible death. Do you want that on your conscience?!

BUT ...

- a) *Parent to teen: If you come home late one more time, your allowance will be cut.*
 - b) *President John Kennedy to Soviet Premier Nikita Krushchev: If you don't remove your nuclear missiles from Cuba, we will have no choice but to remove them by force. If we use force to remove the missiles, that may provoke an all-out nuclear war. Neither of us wants a nuclear war. Therefore, you should remove your missiles from Cuba. (paraphrase)*
- a) = statement, not an argument; b) = not a fallacy; premises are logically relevant to conclusion

Appeal to Pity

- An arguer attempts to evoke feelings of pity or compassion, when such feelings are not logically relevant to the arguer's conclusion.
 - *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 lizard died. Then my girlfriend told me she made out with my cousin. Then I had explosive diarrhea for six whole weeks. 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?
 - *Parent to football coach:* I admit that my son Billy can't run, pass, kick, catch, block or tackle, but he deserved to make the football team. If he doesn't make the team, he's going to be an emotional wreck, and he may even drop out of school.

BUT

- What about these arguments?

Mother to daughter: Nana was asking about you the other day. She's so lonely and depressed since Grandpa passed away, and her Alzheimer's seems to get worse every day. She's done so much for you over the years. Don't you think you should pay her a visit?

High school softball coach: Girls, this state championship is the biggest game of your lives. This is what you've been working for all year. Your parents are counting on you, your school is counting on you, and your community is counting on you. Make them proud! Play like the champions you are!

Here the emotional appeals are appropriate and relevant to the arguers' purposes; hence no fallacy is committed.

Bandwagon Argument

- An argument plays on a person's desire to be popular, accepted, or valued, rather than appealing to logically relevant reasons or evidence.
 - a) Most (or a select group of) people believe or do X.
 - b) Therefore, you should believe or do X.

Examples:

- All the really cool kids in your 6th period vape. Therefore, you should, too.
- There must be something to astrology. Millions of believers can't be wrong.

BUT

- All the villagers I've talked to say that the water is safe to drink. Therefore, the water probably is safe to drink.
- Lots of my friends recommend the Back Street Deli, so it's probably a good place to eat.
- In these bandwagon appeals, the premises are relevant to the conclusion, so the arguments are not fallacious.

Straw Man

- An arguer distorts an opponent's argument or claim in order to make it easier to attack

A) X's view is false or unjustified [but where X's view has been unfairly characterized].

B) Therefore, X's view should be rejected.

- **Examples:**

Pete has argued that the NY Yankees are a better baseball team than the Atlanta Braves. But the Braves aren't a bad team. They have a great pitching staff, and they consistently finish at or near the top of their division, Obviously, Pete doesn't know what he's talking about.

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.

Red Herring

- An arguer tries to sidetrack his or her audience by raising an irrelevant issue and then claims that the original issue has effectively been settled by the irrelevant diversion.

Examples:

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.

Critics have accused my administration of doing too little to save the family farm. These critics forget that I grew up on a farm. I know what it's like to get up at the crack of dawn to milk the cows. I know what it's like to work in the field all day in the blazing sun. Family farms are what made this country great, and those who criticize my farm policies simply don't know what they're talking about.

BUT

Political opponent: Congressman Crookley, now that you have been convicted of bribery, extortion, and grand theft auto, isn't it high time that you resigned from office?

Rep. Crookley response: How 'bout that new Kanye album, eh? Totally lit, my dudes.

Simply *changing or evading the subject* without denying the charge or pretending to refute it **is not a fallacy.**

Equivocation

- 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.
 - Any law can be repealed by the proper legal authority. The law of gravity is a law. Therefore, the law of gravity can be repealed by the proper legal authority.

When the two senses of 'law' (laws regulating human conduct vs. uniformities of nature) are made explicit, it is apparent that the premises *don't support the conclusion*, hence a fallacious argument!

Begging the Question

- An arguer states or assumes as a premise the very thing he or she is trying to prove as a conclusion.
- Two common ways to beg the question
 - Restating the conclusion in slightly different words.

Capital punishment is morally wrong because it is ethically impermissible to inflict death as punishment for a crime.
 - Circular reasoning
 - A: God wrote the bible.
 - B: How do you know?
 - A: Because it says so in the Bible and what the Bible says is true.
 - B: How to you know what the Bible says is true?
 - A: Because God wrote the Bible.

**LET'S TRY TO IDENTIFY
SOME EXAMPLES**

According to the song, the pinball wizard is deaf, dumb, and blind. Dumb people aren't very smart. So, the pinball wizard isn't very smart.

Based on what we've discussed, what fallacy does this argument commit?

According to the song, the pinball wizard is deaf, dumb, and blind. Dumb people aren't very smart. So, the pinball wizard isn't very smart.

The fallacy of equivocation.

The arguer uses the word "dumb" in two different senses.

In the first sentence, "dumb" means "unable to speak." In the second sentence, it means "unintelligent."

Consequently, although the argument may superficially appear to be valid, the premises do not support the conclusion.

**I'm trying hard to understand this guy who identifies himself as a security supervisor and criticizes the police officers in this area. I can only come up with two solutions. One, he is either a member of the criminal element, or two, he is a frustrated security guard who can never make it as a police officer and figures he can take cheap shots at cops through the newspaper.
(adapted from a newspaper call-in column)**

Based on what we've discussed, what fallacy does this caller commit?

I'm trying hard to understand this guy who identifies himself as a security supervisor and criticizes the police officers in this area. I can only come up with two solutions. One, he is either a member of the criminal element, or two, he is a frustrated security guard who can never make it as a police officer and figures he can take cheap shots at cops through the newspaper. (adapted from a newspaper call-in column)

The fallacy of personal attack.

The caller never responds to the previous caller's arguments. Instead, he simply attacks his or her character.

By criticizing the previous caller's motives, the arguer also commits the fallacy of attacking the motive.

The Red Cross is worried about the treatment of the suspected terrorists held by the U.S. at Guantanamo Bay, Cuba. What do they want the U.S. to do with them, put them on the beaches of Florida for a vacation or take them skiing in the Rockies? Come on, let's worry about the Americans. (adapted from a newspaper call-in column)

Based on what we've discussed, what fallacy does this argument commit?

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(adapted from a newspaper call-in column)

The fallacy of straw man.

The Red Cross, of course, is not suggesting that the detainees be treated as vacationers. The caller is misrepresenting the Red Cross's argument in order to make it appear ridiculous.

Barbara Youngblood, a member of the Wilkes-Barre (Pa.) School Board for twenty-three years, had six relatives on the school district payroll before she was voted out of office in 2003. When questioned, she offered the following justification for nepotism in public education:

"Every board member is pushing somebody for a job -- friends' kids, neighbors' kids. . . . This happens not only in the School District. People have relatives working in the same company. It's an everyday happening. Is that a sin?" (Wilkes-Barre *Times Leader*, November 17, 2002)

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Bandwagon argument.

The speaker attempts to justify nepotism--a practice that creates clear conflicts of interest and often results in the hiring of less-qualified applicants--simply by noting that it is widely practiced.

Paul: My philosophy teacher said that it's impossible to prove that our memories are sometimes reliable. It's just something we have to take on faith.

Lisa: That's baloney. I can remember countless times when I recalled information correctly. Isn't that proof enough?

Based on what we've discussed, what fallacy does this argument commit?

Paul: My philosophy teacher said that it's impossible to prove that our memories are sometimes reliable. It's just something we have to take on faith.

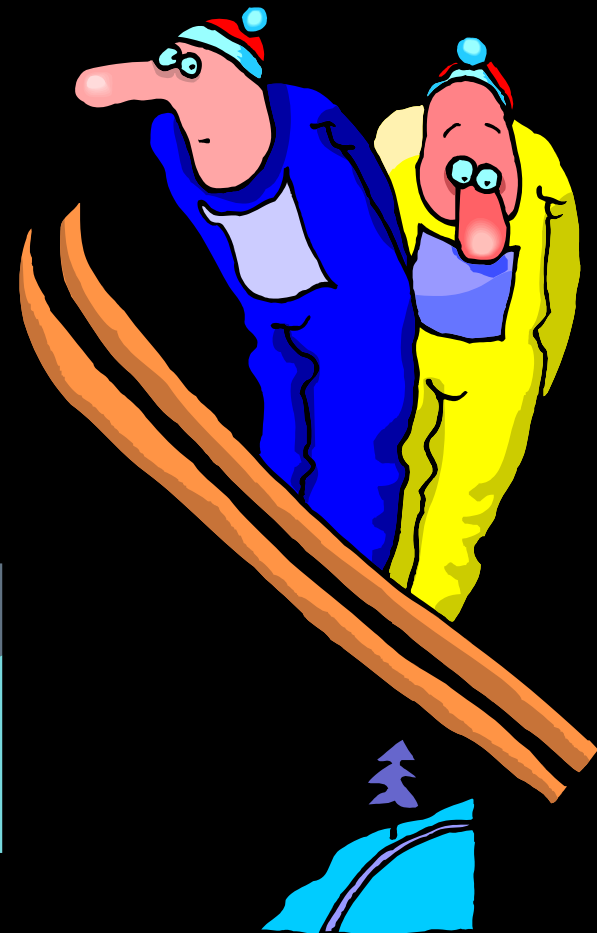
Lisa: That's baloney. I can remember countless times when I recalled information correctly. Isn't that proof enough?

Begging the question.

Lisa is trying to prove that our memories are sometimes reliable. Yet in saying that she *remembers* times when her memory was accurate, she is assuming what she attempts to prove.

Fallacies of Insufficient Evidence

- The following are fallacies of insufficient evidence:
 - Inappropriate appeal to authority
 - Appeal to ignorance
 - False alternatives
 - Loaded questions
 - Questionable cause
 - Hasty generalization
 - Slippery slope
 - Weak analogy
 - Inconsistency
 - Quantitative fallacy
 - Special Pleading
 - Poisoning the Well
 - Wishful Thinking



Inappropriate Appeal to Authority:

- This fallacy occurs when an arguer cites an authority who, there is good reason to believe, is unreliable. You should recognize the following instances of inappropriate appeals to authority:



When the source cited is **not a genuine authority** on the subject under consideration.

When there is reason to believe that the **source is biased**.

When the **accuracy** of the source's observations **is questionable**.

When the source cited (e.g. a media source, reference work, or Internet source) is known to be **generally unreliable**.

When the source has **not been cited correctly** or the cited claim has been taken out of context.

When the source's claim **conflicts with expert consensus**.

When the claim under consideration **cannot be resolved** by expert opinion.

When the claim is **highly improbable on its face**.

Inappropriate Appeal to Authority:

- Hi, I'm former heavyweight boxing champ Mike Tyson. After a tough night in the ring, my face needs some tender loving care. Lather-X Sensitive Skin Shaving Gel. You can't get a smoother, closer shave.

Why is this an *inappropriate appeal to authority*?

- Source is not an authority on skin care.



Inappropriate Appeal to Authority:

- Prof. Huebner has been paid \$100,000 by the *National Enquirer* for his story that he is Steve Jobs' long lost brother. Given Dr. Huebner's reputation for honesty, I think we should believe him, even though he has produced no corroborating evidence and DNA tests fail to support his claim.

Why is this an *inappropriate appeal to authority*?

- The source is biased, with an obvious motive to lie.

Inappropriate Appeal to Authority:

- After taking LSD and drinking seven beers, Jill claims she has a conversation with Elvis' ghost at the San Jose Bar and Grill. I've never known Jill to lie. So, I think we should believe her.

Why is this an *inappropriate appeal to authority*?

– There is reason to doubt the reliability of the witness's observations.



Inappropriate Appeal to Authority:

- Most immigrants who enter this country wind up in jail or on welfare. I know this because I read it on the White Power World Wide web site.

Why is this an *inappropriate appeal to authority*?

- The source is known to be generally unreliable.

Inappropriate Appeal to Authority:

- It states in the Constitution that there must be a 'wall of separation' between church and state. Publicly funded school vouchers clearly violate this wall of separation. Therefore, publicly funded school vouchers are unconstitutional.

Why is this an *inappropriate appeal to authority*?

- The Constitution does not use the phrase 'wall of separation' between church and state.

Inappropriate Appeal to Authority:

- Dr. Duane Gish, a biochemist with a Ph.D. from Berkeley and senior vice president of the Institute for Creation Research, has argued that there is no credible evidence supporting the theory of evolution. In view of Dr. Gish's expertise on this subject, we should conclude that evolution is a myth.

Why is this an *inappropriate appeal to authority*?

- The claim conflicts with the overwhelming opinion of most experts in the field.



Inappropriate Appeal to Authority:

- Dr. Stanford P. Higginbotham, a leading social philosopher, has argued that capital punishment is always morally wrong. Given Dr. Higginbotham's impressive credentials, we should conclude that capital punishment is always morally wrong.

Why is this an *inappropriate appeal to authority*?

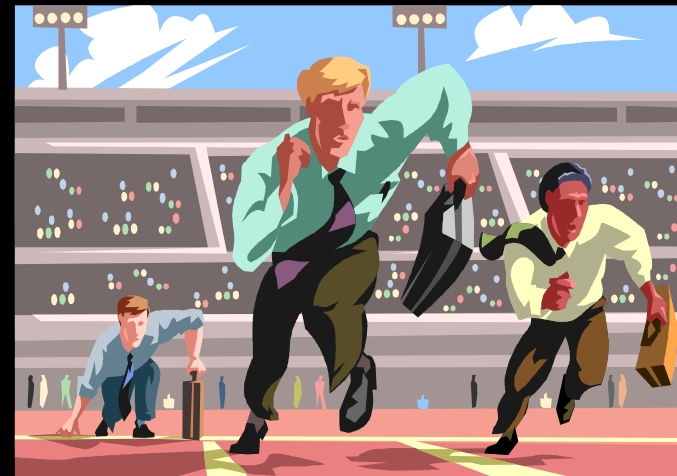
- The source's claim cannot be settled by an appeal to expert opinion – no expert consensus exists.

Inappropriate Appeal to Authority:

- Old Doc Perkins says he has an eighty-year-old friend who can run a 100-yard dash in less than ten seconds. Old Doc is one of the most trusted members of this community. So if Old Doc says he has an eighty-year-old friend who can run a 100-yard dash in less than ten seconds, I, for one, believe him.

Why is this an *inappropriate appeal to authority*?

- The claim is so improbable it should be rejected.



Appeal to Ignorance:

- The arguer asserts that a claim must be true because no one has proven it false, *or conversely*
- The arguer asserts that a claim must be false because no one has proven it to be true.



Appeal to Ignorance:



- There must be intelligent life on other planets. No one has proven that there isn't.
- There isn't any intelligent life on other planets. No one has proven that there is.

Why is this an *appeal to ignorance*?

- Both claims suffer from the basic flaw that they assume that the lack of evidence for (or against) the claim is good reason to believe that the claim is false (or true).

Appeal to Ignorance:

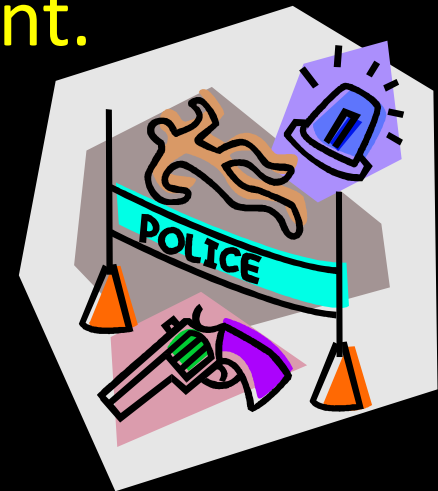
Exceptions:

- Sometimes the fact that a search *hasn't* found something is good evidence that the thing isn't there to be found (e.g., medical trials).
 - A careful search has been conducted, *and*
 - It is likely that the search would have found something is there had been anything there to be found.
- Special rules require a claim to be rejected as false unless a certain burden of proof is met.
 - Innocent until proven guilty beyond a reasonable doubt.

False Alternatives:

- This fallacy is committed when an arguer poses a false dichotomy.
- Either we elect a Republican as president, or crime rates will skyrocket. Obviously, we don't want crime rates to skyrocket. Therefore, we should elect a Republican as president.

Why is this a fallacy of *false alternatives*?



Loaded Question:

- This fallacy is committed when an arguer asks a question that contains an unwarranted assumption.
 - When did you stop beating your wife?
 - Where did you hide the body?
 - Why do you always act like a total jerk whenever you're around my ex-boyfriend?
 - Did you write this immoral trash?

This type of fallacy involves *presupposition*.

Questionable Cause:

- This fallacy occurs when an arguer gives insufficient evidence for a claim that one thing is the cause of another. You should recognize the following instances of *Questionable Cause*:
 - Post hoc fallacy
 - Mere correlation fallacy
 - Oversimplified cause fallacy

Questionable Cause 1:

- **Post hoc fallacy:** This fallacy occurs when an arguer assumes, without adequate reason, that because one event precedes another, that the first event was the cause of the second.
 - How do I know that ginseng tea is a cure for the common cold? Last week I had a bad case of the sniffles. I drank a cup of ginseng tea, and the next morning my sniffles were gone.

Why is this a *post hoc* fallacy?

Questionable Cause 2:



- **Mere correlation fallacy:** This fallacy occurs when an arguer assumes, without adequate reason, that because two conditions or events regularly occur together, that there must be a causal relationship between them.
 - Every 52 years, the Aztecs would sacrifice tens of thousands of prisoners to the sun god to avoid the earth coming to an end. The earth never did come to an end. Therefore, sacrificing thousands to the sun god has prevented the end of the world.

Why is this a *mere correlation*?



Questionable Cause 3:

- **Oversimplified cause fallacy:** This fallacy occurs when an arguer assumes, without sufficient evidence, that a single condition or event is the sole cause of some effect, when there are in fact other contributing causes.
- SAT scores have fallen sharply since the 1960s. Clearly, students are watching too much TV.
Why is this a case of oversimplified cause?

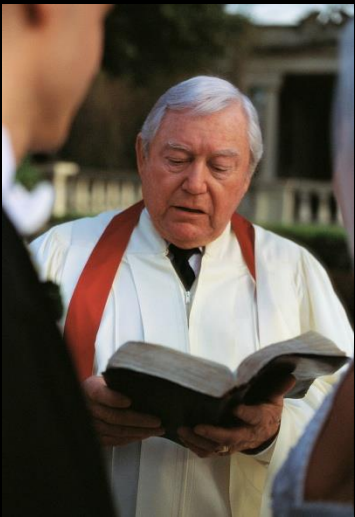
Hasty Generalization:

- This fallacy occurs when an arguer draws a general conclusion from a sample that is either biased or too small.
 - A **biased** sample is one that is not representative of the **target population**.
 - **The target population** is the group of people or things that the generalization is about.
 - Hasty generalizations can often lead to false **stereotypes**.
- I've hired three business majors as student help in the past year. All three were lazy and shiftless. Obviously all business majors are lazy and shiftless.

Why is this a *hasty generalization*?

Slippery Slope:

- An arguer commits this fallacy when they claim, sufficient reason, that a seemingly harmless action will lead to a disastrous outcome.
- **Newt Gingrich says we must vigorously oppose any legalization of same-sex marriage. I agree. Once we allow same sex couples to marry, next we will be permitting marriages among three or more people. Next we will allow people to marry their dogs, cats and pet boa constrictors. Finally, people will want to marry their i-phones, BMWs and Johnnie Walker Black Label, leading to rampant materialism and alcohol abuse. Clearly same sex marriage is a threat to the sanctity of traditional marriage.**



A case of slippery slope? Why?

Slippery Slope:



- Slippery slope arguments generally follow this pattern:
 - The arguer claims that if a certain seemingly harmless action, A, is permitted, A will lead to B, B will lead to C, and so on to D.
 - The arguer holds that D is a terrible thing and therefore should not be permitted.
 - In fact, there is no good reason to believe that A will actually lead to D.



Weak Analogy:



- When the conclusion of an argument depends upon a comparison between two (or more) things that are not similar in relevant respects, the fallacy of weak analogy is committed.
- Why does a family who has no children in a school district have to pay school taxes? This is like paying cigarette taxes even though you don't smoke.

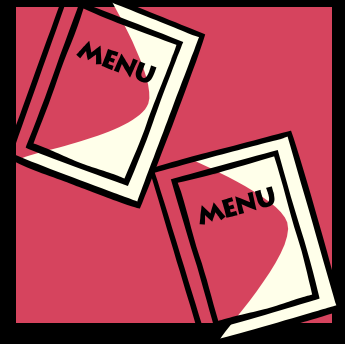
Why is this a *weak analogy*?

Weak Analogy:

- This fallacy generally follows the pattern:
 - A has characteristics w, x, y, and z.
 - B has characteristics w, x, and y.
 - Therefore, B probably has characteristic z, too.
 - But characteristics w, x, and y are not relevant to z or
 - A and B have differences relevant to z which are ignored by the arguer.



Inconsistency:



- This fallacy occurs when an arguer asserts inconsistent premises, asserts a premise that is inconsistent with his or her conclusion, or argues for inconsistent conclusions.

Mickey Mantle: Hey, Yogi, what do you say we eat at Toots' tonight?

Yogi Berra: That place is old news. Nobody goes there anymore. It's too crowded.

Why is this a case of *inconsistency*?

Quantitative (McNamara) Fallacy

- This involves making a decision based solely on quantitative observations (or metrics) and ignoring all others. The reason given is often that these other observations cannot be proven.
- The McNamara fallacy originates from the Vietnam War, in which enemy body counts were taken to be a precise and objective measure of success. War was reduced to a mathematical model: by increasing enemy deaths and minimizing one's own, victory was assured.

“If there’s a bowl of hard candy in front of you and I tell you three of them will kill you, would you grab a handful? That’s our immigrant problem in a nutshell.”

Special Pleading

- Special pleading is an informal fallacy wherein one cites something as an exception to a general or universal principle (without justifying the special exception).
- This is also known as a double standard.

I'm not relying on faith in small probabilities here. These are slot machines, not roulette wheels. They are different.

Wishful Thinking

- When the desire for something to be true is used in place of/or as evidence for the truthfulness of the claim. Wishful thinking, more as a cognitive bias than a logical fallacy, can also cause one to evaluate evidence very differently based on the desired outcome.

I believe that when we die, we are all given new, young, perfect bodies, and we spend eternity with those whom we love. I can't imagine the point of life if it all just ends when we die!

Poisoning the Well

- To poison the well is to prime the audience with adverse information about the opponent from the start, in an attempt to make your claim more acceptable or discount the credibility of your opponent's claim.

Tim: Boss, you heard my side of the story why I think Bill should be fired and not me. Now, I am sure Bill is going to come to you with some pathetic attempt to weasel out of this lie that he has created.

**LET'S TRY TO IDENTIFY
SOME EXAMPLES**

What's to say against [cigars]? They killed George Burns at 100. If he hadn't smoked them, he'd have died at 75. (Bert Sugar, quoted in New York Times, September 20, 2002)

Based on what we've discussed so far, what fallacy does the arguer commit?

Questionable cause. Given the proven health risks of cigar smoking, it is unlikely that cigar smoking caused George Burns to live to be 100.

According to North Korea's official state-run news agency, "a war between North Korea and the United States will end with the delightful victory of North Korea, a newly emerging military power, in 100 hours. . . . The U. S. [will] be enveloped in flames. . . and the arrogant empire of the devil will breathe its last". Given that this prediction comes from the official North Korean news agency, it is probably true. (Passage quoted in Nicholas D. Kristof, "Empire of the Devil," *New York Times*, April 4, 2003)

Based on what we've discussed so far, what fallacy does the arguer commit?

Inappropriate appeal to authority. The North Korean news agency's claim is implausible on its face. Moreover, as a state-run news organization in a totalitarian regime, the agency is simply a mouthpiece of the government, and hence is biased.

Jurors in tobacco lawsuits should award judgments so large that they put tobacco companies out of business. Respecting the right of tobacco companies to stay in business is akin to saying there are "two sides" to slavery or the Holocaust. (Anti-tobacco lawyer, quoted in George F. Will, "Court Ruling Expresses Anti-Smoking Hypocrisy," *Wilkes-Barre Times Leader*, May 25, 2003)

Based on what we've discussed so far, what fallacy does the arguer commit?

Weak analogy. Clearly there are major disanalogies between the tobacco industry and either slavery or the Holocaust, for example, (1) smoking is something that many people enjoy, (2) no one is forced to smoke, and (3) making all due allowances for the effects of second-hand smoke, smoking primarily affects only the health of the smoker, not innocent third parties.

Bob: Affirmative action isn't "reverse discrimination." It isn't discrimination at all. Discrimination is adverse treatment based on an assumption of a group's inferiority, and no one claims that white males are inferior.

Peg: But what about sexual harassment? You admitted earlier that sexual harassment is discrimination, but sexual harassment doesn't always involve an assumption of inferiority.

Bob: Granted, but sexual harassment is still discrimination because it denies equal opportunity in employment.

Based on what we've discussed so far, what fallacy does the arguer commit?

Inconsistency. Bob offers two different—and incompatible—definitions of "discrimination."

It will be tragic if this country ever legalizes gay marriage. Mark my words, once that happens, it won't be long until polygamy and incest are legal.

- Based on what we've discussed so far, what fallacy does the arguer commit?

Slippery slope. Although claims of this sort are often made, the feared consequences strike us as unlikely. The risks of individual and societal harm are much greater with polygamy and incest than they are with gay marriage, and the societal taboos are considerably stronger.

HOMework

- Pick a logical fallacy at random, then create three examples of a one-sentence argument that uses this fallacy. In class, we will try to guess which fallacy it is, just from your examples
- Due next class, 10/31