

Vocabulary 10 – More Logical Fallacies

1. **No True Scotsman** - Making what could be called an appeal to purity as a way to dismiss relevant criticisms or flaws of an argument.

Angus declares that Scotsmen do not put sugar on their porridge, to which Lachlan points out that he is a Scotsman and puts sugar on his porridge. Furious, like a true Scot, Angus yells that no true Scotsman sugars his porridge.

John: Members of the UbaTuba Men's Club are upstanding citizens of the community.

Marvin: Then why are there so many of these members in jail?

John: They were never true UbaTuba Men's Club members.

Marvin: What's a true UbaTuba Men's Club member?

John: Those who don't go to jail.

Explanation: This is a very common form of this fallacy that has many variations. Every time one group member denounces another group member for doing or saying something that they don't approve of, usually by the phrase, "he is not really a *true* [insert membership here]", this fallacy is committed.

The universal claim here is that no UbaTuba Men's Club member will ever (universal) go to jail. Marvin points out how clearly this is counterfactual as there are many UbaTuba Men's Club members in jail. Instead of conceding or meaningfully revising the claim, the implication that no "UbaTuba Men's Club members" is changed to "no true UbaTuba Men's Club members", which is not meaningful because John's definition of a "true UbaTuba Men's Club member" apparently can only be demonstrated in the negative if an UbaTuba Men's Club member goes to jail. This results in the *questionable cause fallacy* as it is also an *unfalsifiable* claim, and of course, it commits the *no true Scotsman* fallacy.

2. **Tu Quoque** - Avoiding having to engage with criticism by turning it back on the accuser -answering criticism with criticism.

The blue candidate accused the red candidate of committing the tu quoque fallacy. The red candidate responded by accusing the blue candidate of the same, after which ensued an hour of back and forth criticism with not much progress.

Helga: You should not be eating that... it has been scientifically proven that eating fat burgers are no good for your health.

Hugh: You eat fat burgers all the time so that can't be true.

Explanation: It doesn't matter (to the truth claim of the argument at least) if Helga follows her own advice or not. While it might appear that the reason she does not follow her own advice is that she doesn't believe it's true, it could also be that those fat burgers are just too damn irresistible.

3. **Texas Sharpshooter** - Cherry-picking data clusters to suit an argument, or finding a pattern to fit a presumption. Ignoring the difference while focusing on the similarities, thus coming to an inaccurate conclusion. Similar to the *gambler's fallacy*, this is an example of inserting meaning into randomness. This is also similar to the *post-designation fallacy*.

The makers of Sugarette Candy Drinks point to research showing that of the five countries where Sugarette drinks sell the most units, three of them are in the top ten healthiest countries on Earth, therefore Sugarette drinks are healthy.

SuperCyberDate.com determined that Sally and Billy are a great match because they both like pizza, movies, junk food, Janet Jackson, and vote republican.

Explanation: What SuperCyberDate.com did not take into consideration were the 245 other likes and dislikes that were very different for both Sally and Billy—such as the fact that Billy doesn't like girls.

4. **The Fallacy Fallacy** - Presuming that because a claim has been poorly argued, or a fallacy has been made, that it is necessarily wrong.

Recognizing that Amanda had committed a fallacy in arguing that we should eat healthy food because a nutritionist said it was popular, Alyse said we should therefore eat bacon double cheeseburgers every day.

Ivan: You cannot borrow my car because it turns back into a pumpkin at midnight.

Sidney: If you really think that, you're an idiot.

Ivan: That is an ad hominem; therefore, I can't be an idiot.

Sidney: I beg to differ.

Explanation: While it is true that Sidney has committed the *ad hominem fallacy* by calling Ivan an idiot rather than providing reasons why Ivan's car won't turn into a pumpkin at midnight, that fallacy is not evidence against the claim.

5. **Appeal to Nature** - Making the argument that because something is 'natural' it is therefore valid, justified, inevitable, good, or ideal. The *appeal to nature fallacy* is often confused with the *naturalistic* and the *moralistic* fallacies because they are quite similar. The *appeal to nature*, however, specifically references "natural" or "unnatural" and can also make a non-moral judgment such as "beautiful" or "destructive."

The medicine man rolled into town on his bandwagon offering various natural remedies, such as very special plain water. He said that it was only natural that people should be wary of 'artificial' medicines such as antibiotics.

I shop at Natural Happy Sunshine Store (NHSS), which is much better than your grocery store because at NHSS everything is natural including the 38-year-old store manager's long gray hair and saggy eye lids.

Explanation: I can appreciate natural food and products as much as the next granola-eating guy, but to make any claim of “betterness”, one needs to establish criteria by which to judge. Perhaps not paying almost twice as much for the same general foods is “better” for me. Perhaps I prefer a little insecticide on my apple to insects inside my apple, and maybe I like faux brunettes with perky eye lids due to “unnatural” fake eye lashes.

6. **Gambler’s Fallacy** - Believing that ‘runs’ occur to statistically independent phenomena such as roulette wheel spins. Reasoning that, in a situation that is pure random chance, the outcome can be affected by previous outcomes.

I have flipped heads five times in a row. As a result, the next flip will probably be tails.

Explanation: The odds for each and every flip are calculated independently from other flips. The chance for each flip is 50/50, no matter how many times heads came up before.

Eric: For my lottery numbers, I chose 6, 14, 22, 35, 38, 40. What did you choose?

Steve: I chose 1, 2, 3, 4, 5, 6.

Eric: You idiot! Those numbers will never come up!

Explanation: “Common sense” is contrary to logic and probability, when people think that any possible lottery number is more probable than any other. This is because we see meaning in patterns -- but probability doesn’t. Because of what is called the *clustering illusion*, we give the numbers 1, 2, 3, 4, 5, and 6 special meaning when arranged in that order, random chance is just as likely to produce a 1 as the first number as it is a 6. Now the second number produced is only affected by the first selection in that the first number is no longer a possible choice, but still, the number 2 has the same odds of being selected as 14, and so on.

Red had come up six times in a row on the roulette wheel, so Jen knew that it was close to certain that black would be next up. Suffering an economic form of natural selection with this thinking, she soon lost all of her savings.

7. **Appeal to Ignorance** - The assumption of a conclusion or fact based primarily on lack of evidence to the contrary. Usually best described by, “absence of evidence is not evidence of absence.”

Although we have proven that the moon is not made of spare ribs, we have not proven that its core cannot be filled with them; therefore, the moon’s core is filled with spare ribs.

Explanation: There is an infinity of things we cannot prove -- the moon being filled with spare ribs is one of them. Now you might expect that any “reasonable” person would know that the moon can’t be filled with spare ribs, but you would be expecting too much. People make wild claims, and get away with them, simply on the fact that the converse cannot otherwise be proven.

8. Fallacy of Exclusion

This is related to the Hasty Generalization, and refers to focusing attention on one group's behavior and assuming that behavior is unique to that group; yet, in fact, the behavior is common to many groups.

Here is an example from a letter to the Argonaut editor a few years back, the week after Halloween. The letter's author complained that fraternities deserved their bad reputations because while wandering around Greek row Halloween night he saw three different "frat boys" puking. However, one might argue that had he wandered around just about any other place kids of this age gathered on Halloween, he'd have seen the same amount of puke.

Ex: A professor wrote a letter to the paper in response to a drunk driving fatality story, in Nashville. In this case, the drunk driver was an illegal alien and the victim was a US Citizen. "Oh my god, this has got to stop! How much is too much? Why are these people [illegal aliens] allowed to live in our country?" Yes, drunk drivers who kill people should themselves be put to death! However, the letter is referring to illegal aliens, as if that was the cause of most, or even many, drunk driving fatalities.

Fallacy Ex: *I'd never live in NYC; it's way too dangerous!* (Indeed many people are murdered in cities, so cities appear to have a high murder *rate* (number of murders per capita) Yet, there are many people in NYC, so in fact the murder *rate* is lower in NYC than in many small towns.)

Fallacy Ex: *Women can't drive!* (If you examine the driving habits of women, you will observe that women are poor drivers. Yet if you were to examine the driving habits of both women *and men*, you'd learn that men are far more likely to get into accidents.

9. Weasel Words or Glittering Generality

This is the use of words so broadly defined – such as “love” or “freedom” or “rights” or “patriotism” etc. etc. – as to become essentially meaningless; no one, and I do mean no one, on this planet, does not value love, freedom, or rights, and most everyone is a patriot of one kind or another. It's the “one kind or another” nature of these words that makes them essentially pointless: they mean something different to everyone, and so their use in an argument frequently means nothing. “Love”, for example, refers to both sexual passion and the nature of God or divine virtue. Technically, their use is probably not a fallacy, but their use tends to move an argument “*nowhere*” while inciting deep emotional responses. Thus, they are rhetorically useful and logically distracting. The current glittering generality is “terrorism” or “terrorist” as it first clearly refers to something most people abhor and second is used so broadly it actually applies to any act of war. This renders those involved in the “war on terror” (itself a misnomer) as themselves “terrorists”. In the case of this word, however, the fallacy is likely equivocation; the word has been rendered semantically useless by having been so often *misused*.

10. Straw Man

One side of the argument is presented as so extreme that no one will agree with it. Often this is done by referring to the exception, rather than the rule, and inferring that the exception is the rule.

Fallacy Ex: *“We either leave right now or we're never going to get there.” “All PETA supporters support the bombing or destruction of laboratories.” “If you surrender your freedoms, the terrorists have already won. You don't want that, do you?” “Hitler supported gun control, you know.”*