

# THE LOGIC LENS: 24 Common Logical Fallacies (Flawed Reasoning)

## FAMILY 1: THE DIRTY FIGHTERS (Evasion and Deflection)

Tactics used to attack the opponent or avoid the topic rather than addressing the argument itself.



**Ad Hominem:** Attacking your opponent's character or personal traits instead of their argument.



**Strawman:** Misrepresenting someone's argument to make it easier to attack.




**Tu Quoque:** Avoiding criticism by turning it back on the accuser ("You do it too!").



**Appeal to Emotion:** Manipulating an emotional response in place of a valid or compelling argument.




**Special Pleading:** Moving the goalposts to create exceptions when your claim is shown to be false.




**Loaded Question:** Asking a question that has an assumption built into it so it can't be answered without appearing guilty.

## FAMILY 2: THE REALITY BENDERS (Cause & Reaction)


Flaws in identifying cause, effect, and consequence, leading to exaggerated or false conclusions.




**False Cause:** Presuming that a real or perceived relationship between things means that one is the cause of the other.



**Slippery Slope:** Asserting that if we allow A to happen, then Z will eventually happen too, therefore A should not happen.



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



**Personal Incredulity:** Because you found something difficult to understand, or are unaware of how it works, you made out like it's probably not true.

## FAMILY 3: THE RIGID RULERS (Authority & Tradition)


Relying on authority figures, purity tests, or "the natural order" instead of evidence.




**Appeal to Authority:** Using the opinion or position of an authority figure, or institution of authority, in place of an actual argument.



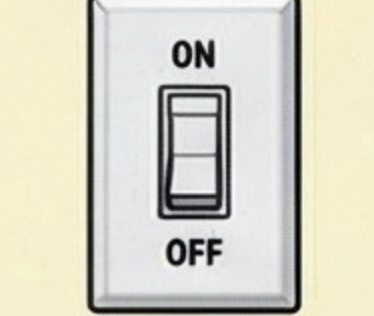
**Appeal to Nature:** Making the argument that because something is 'natural' it is therefore valid, justified, inevitable, good, or ideal.



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



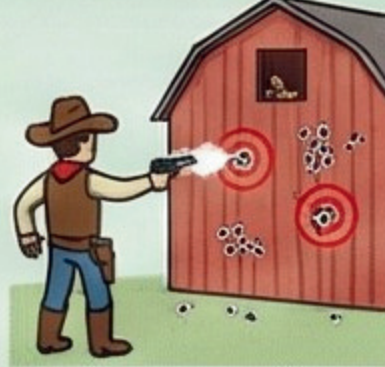
**Genetic:** Judging something good or bad on the basis of where it comes from, or who it comes from.




**Black-or-White:** Presenting two alternative states as the only possibilities, when more exist.

## FAMILY 4: THE DATA TWISTERS (Missing or Bad Evidence)

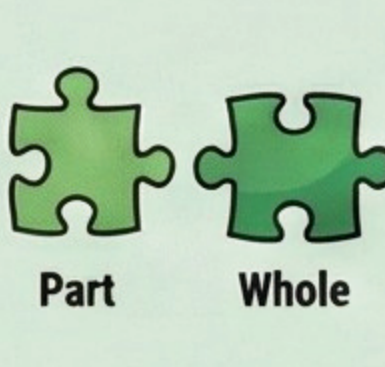
Manipulating, cherry-picking, or misinterpreting statistics and evidence to fit a pre-existing view.



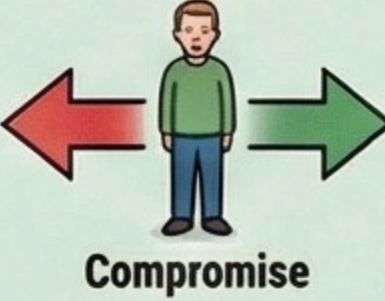
**The Texas Sharpshooter:** Cherry-picking data clusters to suit an argument, or finding a pattern to fit a presumption.



**Anecdotal:** Using personal experience or an isolated example instead of a valid argument or compelling evidence.



**Composition/Division:** Assuming that what's true about what one part of something has to be applied to all, or other, parts of it.



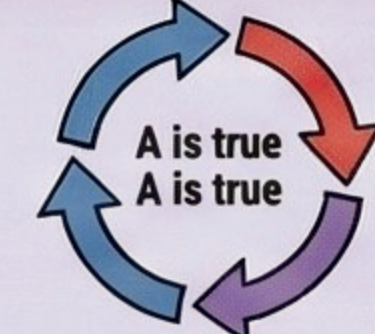
**Middle Ground:** Saying that a compromise, or finding a point between two extremes, is the truth.




**The Gambler's Fallacy:** Believing that 'runs' occur to statistically independent phenomena such as roulette wheel spins.

## FAMILY 5: THE LOGIC LEAPS (Weak Connections)

Making connections between ideas that do not actually exist, or forcing the opponent to prove a negative.




**Begging the Question:** A circular argument in which the conclusion is included in the premise.



**Burden of Proof:** Saying that the burden of proof lies not with the person making the claim, but with someone else to disprove.



**Bandwagon:** Appealing to popularity or the fact that many people do something as an attempted form of validation.



**Ambiguity:** Using double meanings or ambiguities of language to mislead or misrepresent the truth.