

Misrepresenting someone's argument to make it easier to attack.

After Will said that we should put more money into health and education, Warren responded by saying that he was surprised that Will hates our country so much that he wants to leave it defenceless by cutting military spending.



Asserting that if we allow A to happen, then Z will consequently happen too. therefore A should not happen.

Colin Closet asserts that if we allow same-sex couples to marry, then the next thing we know we'll be allowing people to marry their parents, their cars and even monkevs.



Moving the goalposts to create exceptions when a claim is shown to be false.

Edward Johns claimed to be psychic, but when his 'abilities' were tested under proper scientific conditions, they magically disappeared. Edward explained this saying that one had to have faith in his abilities for them to work



Believing that 'runs' occur to statistically independent phenomena such as roulette wheel spins.

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



Where two alternative states are presented as the only possibilities, when in fact more possibilities exist.

Whilst rallying support for his plan to fundamentally undermine citizens' rights, the Supreme Leader told the people they were either on his side, or on the side of the enemy



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

Pointing to a fancy chart, Roger shows how temperatures have been rising over the past few centuries, whilst at the same time the numbers of pirates have been decreasing; thus pirates cool the world and global warming is a hoax.

# ad hominem

Attacking your opponent's character or personal traits instead of engaging with their argument.

After Sally presents an eloquent and compelling case for a more equitable taxation system, Sam asks the audience whether we should believe anything from a woman who isn't married, was once arrested, and smells a bit weird

# loaded auestion

Asking a guestion that has an assumption built into it so that it can't be answered without appearing guilty.

Grace and Helen were both romantically interested in Brad. One day, with Brad sitting within earshot, Grace asked in an inquisitive tone whether Helen was having any problems with a drug habit.



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

Shamus pointed a drunken finger at Sean and asked him to explain how so many people could believe in leprechauns if they're only a silly old superstition Sean, however, had had a few too many Guinness himself and fell off his chair

# begging the question

A circular argument in which the conclusion is included in the premise. The word of Zorbo the Great is flawless and perfect. We

know this because it says so in The Great and Infallible Book of Zorbo's Best and Most Truest Things that are Definitely True and Should Not Ever Be Questioned.





Using the opinion or position of an authority figure, or institution of authority, in place of an actual argument.

Not able to defend his position that evolution 'isn't true' Bob says that he knows a scientist who also questions evolution (and presumably isn't a primate)



Making the argument that because something is 'natural' it is therefore valid, justified, inevitable, or ideal.

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



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

Daniel was a precocious child and had a liking for logic. He reasoned that atoms are invisible, and that he was made of atoms and therefore invisible too Unfortunately, despite his thinky skills, he lost the game of hide and go seek



Using personal experience or an isolated example instead of a valid argument, especially to dismiss statistics.

Jason said that that was all cool and everything, but his grandfather smoked, like, 30 cigarettes a day and lived until 97 - so don't believe everything you read about meta analyses of sound studies showing proven causal relationships.



## Manipulating an emotional response in place of a valid or compelling argument.

Luke didn't want to eat his sheep's brains with chopped liver and brussels sprouts, but his father told him to think about the poor, starving children in a third world country who weren't fortunate enough to have any food at all.



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.

# burden of proof

Saying that the burden of proof lies not with the person making the claim, but with someone else to disprove. Bertrand declares that a teapot is, at this very moment,

in orbit around the Sun between the Earth and Mars. and that because no one can prove him wrong his claim is therefore a valid one

# 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.



Cherry-picking data clusters to suit an argument, or finding a pattern to fit a presumption.

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.

# thou shalt not commit logical fallacies

A logical fallacy is often what has happened when someone is wrong about something. It's a flaw in reasoning. They're like tricks or illusions of thought, and they're often very sneakily used by politicians, the media, and others to fool people. Don't be fooled! This poster has been designed to help you identify and call out dodgy logic wherever it may raise its ugly, incoherent head. If you see someone committing a logical fallacy online, link them to the relevant fallacy to school them in thinky awesomeness e.g. yourlogicalfallacyis.com/strawman. More in-depth explanations and examples of these fallacies can also be found at the website.

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## Presuming that because a claim has been poorly argued, or a fallacy has been made, that it is necessarily wrong.

Recognising that Amanda had committed a fallacy in arguing that we should eat healthy food because it was popular, Alyse resolved to eat bacon double cheeseburgers every day.



## Saying that because one finds something difficult to understand that it's therefore not true

Kirk drew a picture of a fish and a human and with effusive disdain asked Richard if he really thought we were stupid enough to believe that a fish somehow turned into a human through just, like, random things happening over time.



## Using double meanings or ambiguities of language to mislead or misrepresent the truth.

When the judge asked the defendant why he hadn't paid his parking fines, he said that he shouldn't have to pay them because the sign said 'Fine for parking here' and so he naturally presumed that it would be fine to nark there



## Judging something good or bad on the basis of where it comes from, or from whom it comes.

Accused on the 6 o'clock news of corruption and taking bribes, the senator said that we should all be very wary of the things we hear in the media because we all know how very unreliable the media can be.



## Saying that a compromise, or middle point, between two extremes is the truth.

Holly said that vaccinations caused autism in children, but her scientifically well-read friend Caleb said that this claim had been debunked and proven false. Their friend Alice offered a compromise that vaccinations cause some autism

