

Argument By Generalization:

drawing a broad conclusion from a small number of perhaps unrepresentative cases. (The cases may be unrepresentative because of [Selective Observation](#).) For example, "They say 1 out of every 5 people is Chinese. How is this possible ? I know hundreds of people, and none of them is Chinese." So, by generalization, there aren't any Chinese anywhere. This is connected to the [Fallacy Of The General Rule](#).

Similarly, "Because we allow terminally ill patients to use heroin, we should allow everyone to use heroin."

It is also possible to under-generalize. For example,

"A man who had killed both of his grandmothers declared himself rehabilitated, on the grounds that he could not conceivably repeat his offense in the absence of any further grandmothers."

-- "Ports Of Call" by Jack Vance

Appeal To Pity (Appeal to Sympathy, The Galileo Argument):

"I did not murder my mother and father with an axe ! Please don't find me guilty; I'm suffering enough through being an orphan."

Some authors want you to know they're suffering for their beliefs. For example, "Scientists scoffed at Copernicus and Galileo; they laughed at Edison, Tesla and Marconi; they won't give my ideas a fair hearing either. But time will be the judge. I can wait; I am patient; sooner or later science will be forced to admit that all matter is built, not of atoms, but of tiny capsules of TIME."

There is a strange variant which shows up on Usenet. Somebody refuses to answer questions about their claims, on the grounds that the asker is mean and has hurt their feelings. Or, that the question is personal.

Bad Analogy:

claiming that two situations are highly similar, when they aren't. For example, "The solar system reminds me of an atom, with planets orbiting the sun like electrons orbiting the nucleus. We know that electrons can

jump from orbit to orbit; so we must look to ancient records for sightings of planets jumping from orbit to orbit also."

Or, "Minds, like rivers, can be broad. The broader the river, the shallower it is. Therefore, the broader the mind, the shallower it is."

Or, "We have pure food and drug laws; why can't we have laws to keep movie-makers from giving us filth ?"

Argument By Rhetorical Question/Loaded Question:

asking a question in a way that leads to a particular answer. For example, "When are we going to give the old folks of this country the pension they deserve ?" The speaker is leading the audience to the answer "Right now." Alternatively, he could have said "When will we be able to afford a major increase in old age pensions?" In that case, the answer he is aiming at is almost certainly *not* "Right now."

"Have you stopped beating your wife ?"

Appeal To Widespread Belief (Bandwagon Argument, Peer Pressure, Appeal to Common Practice):

the claim, as evidence for an idea, that many people believe it, or used to believe it, or do it.

If the discussion is about social conventions, such as "good manners", then this is a reasonable line of argument.

However, in the 1800's there was a widespread belief that bloodletting cured sickness. All of these people were not just wrong, but horribly wrong, because in fact it made people sicker. Clearly, the popularity of an idea is no guarantee that it's right.

Similarly, a common justification for bribery is that "Everybody does it". And in the past, this was a justification for slavery.

Appeal To Authority:

"Albert Einstein was extremely impressed with this theory." (But a statement made by someone long-dead could be out of date. Or perhaps Einstein was just being polite. Or perhaps he made his statement in some specific context. And so on.)

To justify an appeal, the arguer should at least present an exact quote. It's more convincing if the quote contains context, and if the arguer can say where the quote comes from.

A variation is to appeal to [unnamed authorities](#).

There was a New Yorker cartoon, showing a doctor and patient. The doctor was saying: "Conventional medicine has no treatment for your condition. Luckily for you, I'm a quack." So the joke was that the doctor boasted of his *lack* of authority.

- **Appeal To False Authority:**

a variation on [Appeal To Authority](#), but the [Authority](#) is outside his area of expertise.

For example, "Famous physicist John Taylor studied [Uri Geller](#) extensively and found no evidence of trickery or fraud in his feats." Taylor was not qualified to detect trickery or fraud of the kind

used by stage magicians. Taylor later admitted Geller had tricked him, but he apparently had not figured out how.

A variation is to appeal to a non-existent authority. For example, someone reading an article by Creationist Dmitri Kuznetsov tried to look up the referenced articles. Some of the articles turned out to be in non-existent journals.

Another variation is to [misquote](#) a real authority. There are several kinds of misquotation. A quote can be inexact or have been edited. It can be taken out of context. (Chevy Chase: "Yes, I said that, but I was singing a song written by someone else at the time.") The quote can be separate quotes which the arguer glued together. Or, bits might have gone missing. For example, it's easy to prove that Mick Jagger is an assassin. In "Sympathy For The Devil" he sang: "I shouted out, who killed the Kennedys, When after all, it was ... me."

Two Wrongs Make A Right (Tu Quoque, You Too, What's sauce for the goose is sauce for the gander):

a charge of wrongdoing is answered by a rationalization that others have sinned, or might have sinned. For example, Bill borrows Jane's expensive pen, and later finds he hasn't returned it. He tells himself that it is okay to keep it, since she would have taken his.

War atrocities and terrorism are often defended in this way.

Similarly, some people defend capital punishment on the grounds that the state is killing people who have killed.