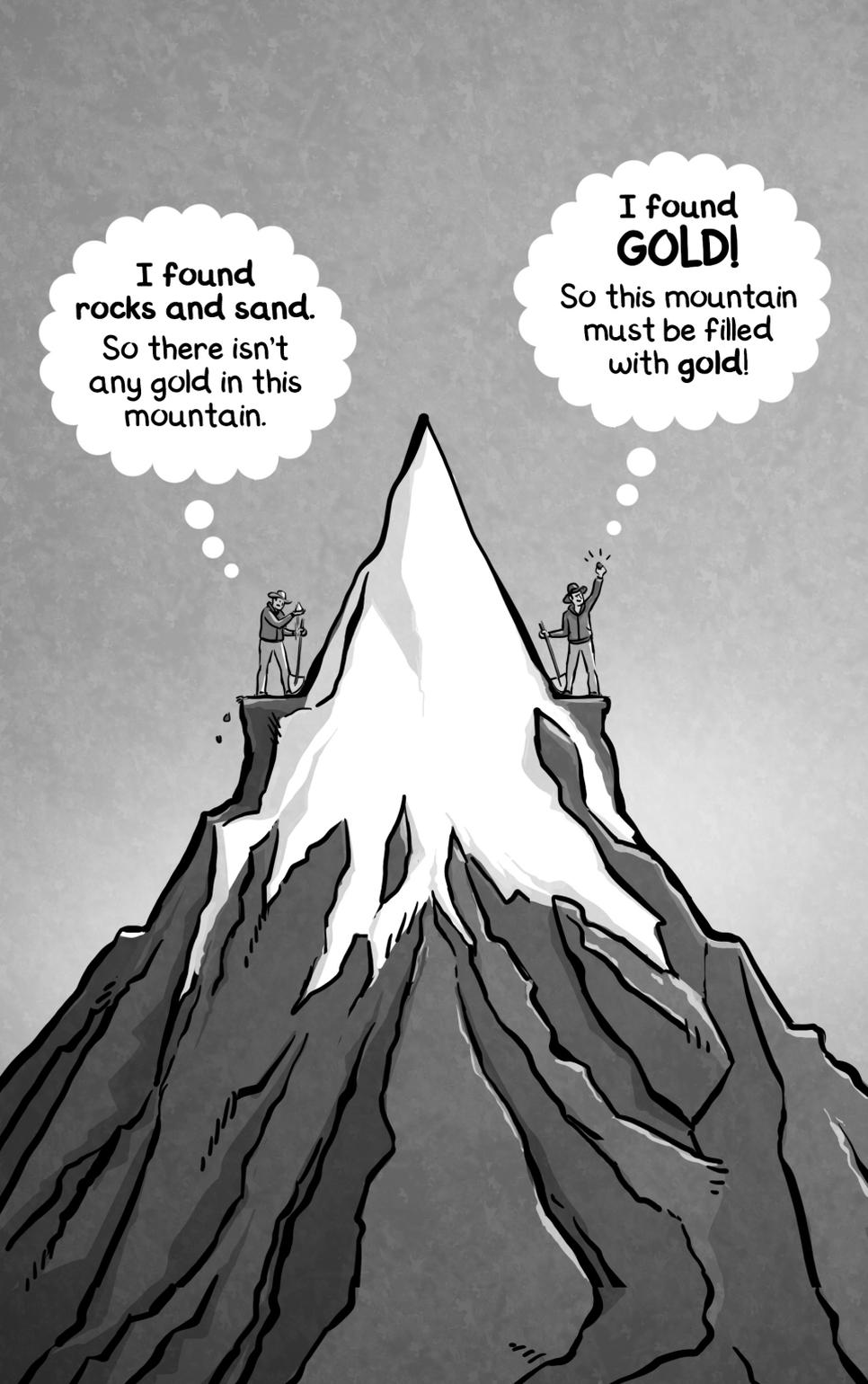


ANECDOTAL

Generalizations can help us make sense of the world, but limited experience and isolated examples shouldn't replace a solid argument or actual evidence.



I found rocks and sand.
So there isn't any gold in this mountain.

I found **GOLD!**
So this mountain must be filled with gold!



The most dangerous thing about living by the ocean is shark attacks.

I know because my cousin was bitten while surfing last year.



True, people of color are being sentenced more harshly.

But the judge goes to my church, and he doesn't seem racist.

A Story is Not Proof

When debating a friend, you have to think quickly, and it may be tempting to use personal stories about yourself, a relative, or someone you heard about as valid evidence. Oftentimes using these personal stories as evidence commits a common logical mistake, the *anecdotal fallacy*.

The anecdotal fallacy occurs when a person draws a conclusion about the causation of some event based upon anecdotal evidence. Anecdotal evidence is based solely on the personal experience of one person or a small number of people. Although these personal stories may be compelling, they cannot be used as blanket statements to establish facts for the general population. Here are a couple of examples of the fallacy in action:

Flying is a very dangerous way to travel. I know this because my aunt was in a plane crash. We will be much safer if we drive.

Scientists and researchers say smoking causes you to die young. But my grandma Laberta smoked like a chimney and lived until she was 90! So clearly the scientists are wrong.

Both of these examples use personal stories that are outside of the statistical norm; flying is safer than driving and smoking increases your chances of dying young. By using anecdotal examples like a single plane crash, you create an emotionally charged, but poorly reasoned, argument. These stories do nothing to address the researched statistics of large populations because one example isn't enough evidence to disprove the norm.

The anecdotal fallacy can be tempting for creating emotional appeal for your argument. Stories have a great psy-

chological influence over us. The media knows this. They often opt to report more heavily on stories that garner highly emotional responses. Media outlets would much rather report on a fatal plane crash than a car accident involving injured drivers. Why? Because they want to attract as many viewers and readers as possible and the most shocking stories draw people in.

There's a saying for news media: "when a dog bites a man, that is not news, but when a man bites a dog, that is news." Of course, car crashes (or dog bites) are much more common than plane crashes (or human bites). Yet, a plane crash adds more shock value, making us more likely to watch their reports from the crash site. You must remember the amount of shock a story packs in does nothing to increase the probability of that type of event recurring.

In addition, those shocking stories fail to strengthen your argument. The goal should be to address the other person's argument with strong reasoning. You should not try to earn shock value by thinking of a personal story to counter your opponent's position because it does nothing to undermine their argument.

You must resist the temptation to earn emotional points from your opponent or the audience. Even if the story sways the position of your opponent or audience, it has done nothing towards developing knowledge for you, your opponent, or those listening. Personal and anecdotal stories distort facts and muddy the understanding of truth.

Because the news continuously commits this fallacy, some people have become disproportionately fearful of unlikely events, such as terrorism, kidnapping, and shark attacks. This blurring of facts can have potentially dangerous real

world implications. This is why discussing facts is important in debating. The spread of misinformation can be toxic and dangerous. It is so important to learn and recognize when this fallacious argument tactic is being used, either by yourself or others. This will lead to more thoughtful discussion, a better understanding of ideas, and the discovery of reliable truth.

The use of the anecdotal argument usually is formed when:

- Person A said X happened once when Y happened.
- Person A concludes X happens every time Y happens.

An Example with Ethan and Emily

Ricky walked into the hallway where Ethan, Emily, and Jane were talking. He had a huge smile on his face.

“What happened to you?” Emily asked.

Ricky flexed his arm muscle. “I’m going to start hitting the gym. I’ve finally realized the answer to making the starting squad this season and now I’m sure I’ll make it!”

Ethan cocked an eyebrow. “What? How do you figure that?”

Ricky explained, “Marcus has been going to the gym for over a year now, and he started the whole second half of the season last year. It’s a cinch!”

Jane frowned, looking at Ricky, “Don’t you think there’s more to Marcus starting than just hitting the gym a couple months before the season?”

Ethan thought of the season that just ended. “Ricky, I don’t remember your making it to any extra practices last year.”

Ricky shook his head. “Anyway, Jason joined the gym two months ago, and he got a recruitment letter from State U. this week!”

Ricky bolted down the hall, fist-pumping the air, leaving Ethan and Emily to wonder what happened.

What Happened?

Ricky made an anecdotally fallacious argument.

He used two stories, one about Marcus and another about Jason, to support his belief that working out at the gym would assure him of athletic success.

He failed to take into account many other factors that could have led to success for Marcus and Jason. Marcus might be naturally more athletically talented than most of the other team members. Or, it may be the case that most of Marcus’s success comes from his participation in extra team practices. Likewise, Jason working out at the gym two months ago had little effect on why the State U has sent him a recruitment letter.

Extraordinary claims require extraordinary proof, not particular parts of a story of what happened to a friend.

Ricky’s desired outcome is so strong in his mind that he has rationalized a chain of causation from working out—also just being at the gym—to the success he desires.

Jane points out an important flaw in Ricky’s reasoning.

Much like in the examples mentioned earlier, Ricky is only considering his chosen evidence. With the anecdotal fallacy, this is often the use of a personal story, but for Ricky, this is choosing part of the story as reasoning for Marcus' success with the team. Ricky fails to account for the other factors (evidence) of Marcus's success—natural athleticism, attending practice, running, and more.

Essentially, Ricky is picking an anecdotal piece of the evidence to determine his reasoning for going to the gym.

For example, if someone in a car accident wasn't wearing her seatbelt and didn't get injured, does that support an argument that seat belts are not necessary, or are even counter-productive? No; all anecdotal evidence needs to be backed up with data.

For example, instead of just using statistics in your argument, you could use anecdotal evidence to support this point, such as naming circumstances where a seat belt saved the life of a friend of yours in a car accident. In this case you're not being fallacious because you provided your fact-based reasoning with additional anecdotes to support that reasoning. That's not being fallacious; that's just good argumentation.

Anecdotes can be analogies *illustrating* proof, but are not, themselves, proof of anything.

Tuttle Twins Takeaway

Avoid anecdotal fallacies by focusing on *real* evidence, not stories about a single person or a small group. Be especially careful when the single person in question is

you. Avoiding this fallacy will strengthen your thinking about the real world, but it does not mean that you must, or should, avoid anecdotes completely. Remain a skeptical thinker and evaluate anecdotes according to the actual value they provide. It does not matter whether an anecdote is wrong. The anecdote may very well be perfectly true in that instance. But, what might be correct in one case is not necessarily correct in all other cases.