

Chapter 6: Relevance Fallacies

Let's do a brief review. We know that with deductive reasoning, a valid argument guarantees the truth of the conclusion if the premises are assumed to be true. We know that a sound argument is valid, but its premises are, in fact, true. We know that truth isn't as simple as it seems, even in science, but still attainable. We know that inductive arguments are strong if their premises support the conclusion, but weak if the premises do not. We know that, even if we are likely not living in an illusion such as *The Matrix*, it is still difficult to find good sources. When we ask about the truth of a claim, we must ask both about the claim itself as well as the source of the claim. We discussed some criteria for determining whether a source is good (for example, peer review). Now, for the remainder of the class, we will turn to mistakes in reasoning, or *fallacies*.

Fallacies in General

The first order of business here is to distinguish fallacies from the cognitive biases we've already discussed. According to the dual processing model of mind from chapter 1, cognitive biases are specific examples of fast thinking—mental shortcuts that simplify the world for us to make it easier to understand. Recall that we discussed specific cognitive biases, such as the in-group bias, which makes us think of those in our group as “right” and those outside our group as “wrong,” regardless of the evidence and arguments involved.

Although fallacies and biases can both cause us to reason poorly, a fallacy is not just a mental shortcut but a full-fledged (but failed) attempt at creating an argument. Another way to say it is that a fallacy is an attempted argument in which the premise doesn't prove, doesn't support, or isn't really relevant to the conclusion. To take us back to the language from the first chapter, fallacies make use of ethos (personal characteristics) and pathos (emotion), and more, rather than logos (reason).

Fallacies are tricky because sometimes they seem like good arguments. If you are never introduced to fallacies, in fact, people using them might even sound clever. For example, in debates about God you often here someone say, “But you can’t prove that God doesn’t exist, so he must exist.” If you didn’t know any better, that might sound like good reasoning. The fallacy here is the misplaced burden of proof. If you make a claim (as is the case in a court of law), you better have evidence to back it up. Another way to say it is that you can’t prove a negative. If someone claims that God exists, they had better be able to back it up with some reasons or evidence. After all, that person made a positive claim about the existence of something.

This example also illustrates another important point: fallacies can sometimes be turned into arguments by slightly changing the premises or conclusion. Let’s modify the above quote to say: “But you can’t prove that God doesn’t exist, so for all we know there may be some kind of higher power.” In this case, the conclusion is not overdrawn. It’s not necessarily unreasonable to discuss the possibility of a higher being given that we can’t disprove such a being's existence (some might call it a weak argument, but I would still at least call it an argument). For more examples of turning fallacies into arguments, see the end of this chapter.

In an argument, there is clear relevance between premises and conclusion. But in a fallacy, that relevance gets lost somehow. In a fallacy, premises may also be said to be *inadequate*, as we will see in the next chapter on inductive fallacies. In the misplaced burden of proof, there is no relevance between not being able to prove something and its possible existence. There are all sorts of beings whose existence we can’t disprove, but it doesn’t mean that these beings exist (the Easter Bunny, Santa Claus, etc.). In the second quote, I realigned the argument to have relevance between premise and conclusion.

The bad news about this material is that there are way more fallacies out there than you could ever hope to learn in a single class. Compound that with the fact that different textbook authors categorize fallacies

differently, and name them differently. In this and the other fallacy chapter I have chosen fallacies that are often listed as most commonly used. I have also chosen fallacies that I most often see my students, myself, and others fall prey to.

The good news is that your benefiting from this material does not depend on memorizing all the fallacies in existence. The fallacies are just a tool, a metric, to help you recognize bad reasoning. That being said, at the beginning stage of learning to reason well (a stage I assume most of you are at since you're taking this class), it helps to have guides/frameworks, which is why I do ask you to know the names and definitions of some fallacies. On the part of the assessment that addresses this material, you will be asked to read passages and recognize which fallacy, if any, is being used, just like in the homework.

We will be discussing two categories of fallacies: 1) Relevance fallacies and 2) Inductive fallacies. Relevance fallacies are what they sound like: attempted arguments in which there is no obvious relevance between premises and conclusion. The focus of this chapter is relevance fallacies. Inductive fallacies are attempted arguments where the premises may be relevant to the conclusion, but they are inadequate. I mentioned the hasty generalization in chapter 4, which happens when someone tries to make a generalization with a sample that is too small. If I take only one apple out of the barrel of 100 apples and it's rotten, it would be a hasty generalization for me to conclude that the last 99 apples are rotten. The premise is relevant to the conclusion, but not adequate enough to support it. I need a bigger sample to make it an argument rather than a fallacy.

Before we turn to additional relevance fallacies, a word of warning. If you haven't learned these fallacies before, you will start seeing them around you. You will recognize friends using them, parents, even teachers! You will see them on the news, in YouTube videos, and more. It's important to realize that the presence of a fallacy does not necessarily discredit the source. People sometimes use fallacies casually for fun. People also sometimes intersperse fallacies with arguments.

Conspiracy theory films are great examples of the latter. These films sometimes contain legitimate points that are not being talked about by mainstream media or scholars, but they will also often use just about every fallacy in the book. As I've been arguing to you throughout this class, it's important to sift through the ethos and pathos to get to the logos—don't throw the baby out with the bathwater.

Ad Hominem

Ad hominem is a Latin phrase meaning “at the man.” This fallacy occurs when someone attacks the person stating a claim or making an argument rather than the claim or the argument itself. It might be true that someone is an idiot, but it doesn't follow that his argument is idiotic. Likewise, just because you think someone is brilliant it doesn't follow that his argument is always brilliant (as a matter of fact, brilliant people can come up with some ridiculous ideas).

Here is a very simple example: “Maria can't even spell so her claim about how much our country needs good healthcare must be false.” Do you see what's happened? Maria's claims about health care shouldn't depend on whether or not she can spell. It's true that a person's circumstances can cause us to be skeptical about someone's claim—if, say, a person with no education is making complex claims about weather patterns—but it should not cause us to reject the claim right away.

Ad hominem fallacies can be more subtle too. If I rejected, say, a man's argument about marriage simply because he'd been through a divorce, I would be committing an ad hominem. I might reject a person's argument due to his inconsistencies. Just because a person changed his mind about a particular topic doesn't mean his argument should be rejected outright. Sometimes people *poison the well* against someone else, or they commit an ad hominem in advance. Before a speaker gets on the stage, a prior speaker might tell the audience not to listen to the next speaker, thus poisoning the image of the next speaker in the audience's mind before he even gets a chance to speak.

Some of you might be relating all this back to credibility. After all, when we discussed credibility we found that a person's personal circumstances, like lack of reputation or education, *are* relevant to credibility. But keep in mind that it's a fallacy only if we draw the wrong conclusion from the premises. It's only a fallacy if we completely reject someone's argument due to personal circumstances, but we are entitled to be skeptical of someone's argument due to personal circumstances. If I am listening to a speaker who is, say, a physicist and he starts talking about theology, I can still listen to his argument while being skeptical. Outright rejecting his argument would be an *ad hominem*.

There is one last variation of the *ad hominem*, *the genetic fallacy*. The genetic fallacy is basically an *ad hominem* applied to an entire time period or organization. If I assume that the origin of a claim refutes that claim, I am committing this fallacy. In the senate, bills are often rejected simply because they were created by the opposing political party—a perfect example of the genetic fallacy.

Straw Man

A man made of straw is easy to push to the ground. A real man is harder to push to the ground. What happens in this fallacy is that someone builds up someone else's position like it's made of straw, then easily knocks it down. In other words, someone attributes a false position to an opponent, then easily attacks that false position. If he had described the true position, it wouldn't be so easy to knock down. Sometimes the straw man fallacy aims to make someone's argument or claim look downright ridiculous. For example: "This is what communists actually believe..." "This is what republicans actually believe..."

If you're in my online class, you'll notice that on the discussion boards I ask you to paraphrase each other's posts before replying. While some of you may not enjoy this, being forced to reflect on what someone else actually says helps to prevent straw man fallacies from occurring. If you're in my face-to-face class, you'll notice that I ask you to paraphrase

any arguments or ideas that you discuss in your papers. This, also, is a way of preventing straw man fallacies. If there are fewer straw men, there is more meaningful communication, a major goal of any philosophy class.

One way to avoid straw men is to do your best to understand everything you learn thoroughly. Sometimes people commit straw men, they misinterpret an idea or theory, simply because they never understood the idea or theory in the first place.

False Dilemma

A false dilemma fallacy is just what it sounds like: two options are presented when there are, in fact, other options. And often, one option is shown to be supremely undesirable, in an effort to get listeners to accept the other option. The problem with the false dilemma is that it's an attempt to simplify something into a black or white, binary distinction when that something is more complicated. Sometimes politicians and other leaders say things like this: "Either you're with us, or you're against us." False dilemma. Note that there are cases where there are truly only two choices; such cases are not false dilemma fallacies. For example: "Either you are Paris Hilton or you are not." There are only two possibilities here.

There are two common variation of the false dilemma. The first is called *the perfectionist fallacy*. The perfectionist oversimplifies the world into two options, but based around perfection: either we do something perfectly, or we don't do it at all. Someone might suggest, for example, that there is no point to having a police force, since no matter what we do there will always be crime. But just because the police are not perfect (that is, they don't stop *all* crime), does not mean that we shouldn't have a police force at all.

The second variation is called *the line-drawing fallacy*. Since it's a variation of the false dilemma, this fallacy of course suggests that there are only two options when there are really more: in this case, either we

can draw a clear line or a line can't be drawn at all. This fallacy is related to another philosophical problem called *the paradox of the heap*. When does a heap of pebbles become a heap of pebbles? After I add three pebbles, four pebbles, five pebbles, 23 pebbles? It's impossible to give the exact number of pebbles it takes for a heap to become a heap. Nevertheless, there still are heaps of pebbles. Thus, the mere fact that we cannot pinpoint exactly when the pile becomes a heap does not mean that it doesn't, at some point, become a heap.

Misplaced Burden of Proof

I gave an example of the misplaced burden of proof earlier. If you make a claim, it's on you to prove it. If you say something is the case, you must show how it's the case. A common variation of this argument is the *appeal to ignorance*. The appeal to ignorance basically says, "You can't prove it's false, so it must be true." Or it says, "You can't prove it's true, so it must be false." Again, if you make a claim that something is false, it's on you to show how it's false. The fact that someone else can't prove your claim to be true doesn't make it false. This appeal exploits the things about the world that we don't know. You can't logically move from a state of ignorance (you can't prove it) to a state of positive knowledge (it exists). Notice that both of the following are fallacies: "You can't prove God doesn't exist, so he must exist." "You can't prove that God does exist, so he must not exist."

Often, people who understand logic well—like lawyers and politicians—will deliberately misplace the burden of proof to make their opponent look bad. They know the burden of proof is on them, but they want to shift focus away from themselves so they purposefully commit a burden of proof fallacy to catch their opponent off guard. Consider yourself now intellectually armed against such people.

Begging the Question (reasoning in a circle)

The begging the question fallacy is sometimes referred to as reasoning in a circle, or circularity. This is because, in this fallacy, the arguer tries to

get you to accept the very thing he's trying to prove. The failed argument essentially looks like this: "You should accept X because of X." However, the terms used are typically clothed in different language so that it doesn't seem to be repeating the same point. In logical terms, begging the question says the same thing in the premises as it does in the conclusion.

Here's a common example: "God exists because the bible says so. And we know that the bible is an authoritative source of information, because it was divinely inspired." It is implied that divine inspiration is the result of the existence of some sort of God. So this is basically saying, "We know God exists because God exists." This is begging the question, reasoning in a circle, assuming what is trying to be proved.

Appeals to Emotion

There is nothing wrong with expressing emotion or feeling it, but emotion alone is variable both between and among people and, therefore, cannot be a justification for an argument. An appeal to emotion fallacy happens when emotion gets substituted for reason. There are a variety of appeals to emotion, and I've listed some of the most common below. However, for the purposes of the assessment, you only need to be able to recognize *any* appeal to emotion as an appeal to emotion. In other words, if one of the answers on the assessment is technically scare tactics (a type of appeal to emotion), the answer will nevertheless just be "appeal to emotion."

Scare Tactics

Journalist Naomi Klein in her book *The Shock Doctrine* argues that governments quickly push policies when citizens are in a state of shock as a result of a natural disaster or terrorism of some kind.¹ The idea is that governments use citizens' shock as a means of getting them to

¹ Klein, N. (2008). *The shock doctrine: The rise of disaster capitalism*. New York, NY: Picador.

accept new legislation and reform. If Klein is right, what governments do is an example of the scare tactics fallacy.

This is a fallacy that tries to scare people into accepting something or doing something; it replaces reason with fear. If you make people afraid, they are more likely to look for solutions, and perhaps listen to your solution. Like anger, fear can prevent us from seeing the reasoning (if any) behind an issue. It can prevent us from seeing what's really going on.

Some people argue that former vice president Al Gore's movie, *An Inconvenient Truth*, used scare tactics in its before/after depiction of the Boulder Glacier. In the film, Gore showed a picture of the Boulder Glacier in the early 20th century, when it was big with lots of snow. Then he showed a picture of the same glacier more recently, when much of the snow had melted away. Is this scare tactics? Probably, but others have also pointed out that Gore had scientific evidence to support his case as well. Gore's movie is an example of the way fallacies and reason can sometimes work together.

It's worthwhile to point out that sometimes there are legitimate reasons for being scared. Not everyone who presents scary information is committing a scare tactics fallacy. If you are, let's say, a programmer for a software company and someone cites a statistic that programmers are losing their jobs left and right (and you have reason to believe this statistic is accurate), this is a legitimate reason for being scared that you might lose your job.

Outrage

Many of us get angry. Some more than others. Sometimes we have a reason for being angry. If we find, for example, that our significant other has been cheating on us with one of our friends, it seems safe to say that we are justified in our anger toward our significant other, and our friend. But sometimes we get angry without really having a reason. If there is no reason, it's an appeal to emotion.

Wishful Thinking

This is a common fallacy, which perhaps merits its own category. The fallacy happens when we accept, or fail to accept, a claim simply because it would be pleasant or unpleasant if it were true. Many self-help books commit this fallacy. One common theme that runs through self-help is the idea that you can “be whatever you want to be.” This may prompt you to believe that you can be a basketball star, even if you are under 5 feet tall. Probably the most common example of wishful thinking is believing in an all-loving God because it is more pleasant to think that such a God is watching over you. Of course, people believe in God for many different reasons, including rational ones. But if the belief is purely based on what you *want* to be true, then it’s wishful thinking.

Pity

The argument from pity is a fallacy where we feel pity for someone, but as a result we are driven to some conclusion on an unrelated matter. Professors, naturally, get this all the time. For example, at the end of the semester students will often email me to say that they need an A to get into some internship, or some program. The expectation is that I will feel pity for them, then give them the A. The problem is that there are clear requirements for earning an A, and a student must meet those requirements to get it. The fact that I might feel pity for a student does not change the fact that he or she didn’t meet the requirements.

Apple Polishing

This fallacy is exactly what it sounds like, and is derived from the teacher’s pet stereotype. When someone praises someone else to substitute for the truth of a claim, they are committing the apple polishing fallacy. A more base way to say it is “ass kissing.” If a student tells me how great a teacher I am, and I let this influence the grade I give him, then I have committed the apple polishing fallacy. A student’s accomplishments in the class should speak for themselves.

Guilt Trip

This one's pretty obvious. Most of us are familiar with the concept of "guilt-tripping" someone. If you try to make someone feel guilty to get her to do or believe (or not do or disbelieve) something, then you are committing this fallacy. Imagine that you are my boss and you catch me stealing from the company. You might want to fire me. But imagine that when you try to fire me, I tell you not to do it because I have a family and I will be forced to live on the streets without a job. I would be committing the guilt trip fallacy: instead of addressing the fact that I stole from the company, I try to get you, my boss, to feel guilty for firing me.

Notice that a person who attempts to make someone else feel guilty is using the guilt trip fallacy. It almost seems like pity. But the pity fallacy happens when the speaker feels pity for someone else; it does not necessarily involve getting someone else to feel pity for him. Thus, if you as the boss in the example decided not to hire me because *you* felt bad for my situation, then you would be using the pity fallacy, while *I* would still be using the guilt trip.

Irrelevant Conclusion (Red Herring or Smoke Screen)

This fallacy occurs when someone introduces a distraction from the original point of a discussion, then goes on to conclude something irrelevant about that separate point. This fallacy is very common and often occurs in a conversation without either party being aware. In a heated debate, this fallacy is usually implemented because the parties involved don't want to be wrong about something, so they introduce a separate point to lead the conversation in another direction.

Let's say you're having a discussion with a friend and she is discussing the injustices of the world, saying that there has been genocide in more countries than she can name. You are skeptical about how she's using that term, so you ask her to define it so her point is clearer. She responds by asking you to define a complex term (say, imperialism) on the spot—

presumably her point is that it's difficult to define terms outright. But this is a red herring because the issue was her discussion of genocide, not your ability or inability to define imperialism.

Although some philosophers will distinguish the red herring, smoke screen, and irrelevant conclusion, for the purposes of this class they are the same. The differences, in my view, are too subtle to be useful.

Also, it should be noted that sometimes people clearly use fallacious reasoning, and yet it doesn't seem to fit a specific category. This ambiguity is due to the fact that language use is complex, and fallacies are simply tools to help us understand bad reasoning. So we will use the irrelevant conclusion not just when there is a distraction from the original point, but also when we know there is a fallacy but the passage does not fit any of the other categories.

Turning Fallacies into Arguments

Once again, turning fallacies into arguments just means restructuring the fallacy so that the premises are relevant to the conclusion. This process may involve changing the premises, or changing the conclusion, but not both. Some part of the original passage should remain. Let's look at a couple of additional examples (there are already some examples above in the chapter).

Consider the following ad hominem fallacy: "The president's immigration proposal is not coherent. He just wants the Latino vote in the next election."

This is a fallacy because the speaker does not provide any legitimate reasons as to why the proposal is incoherent, and instead diverts the conversation to a personal characteristic (the president's apparent desire for the Latino vote). So to turn this into argument, we have to provide legitimate reasons. Notice that in this case, we are leaving the conclusion alone, and changing the premises. What sort of premises/reasons would justify an immigration proposal being incoherent? Something like this:

1. The president's immigration proposal is filled with typos and poorly-worded sentences.

2. Immigration experts cannot even understand the ideas in the proposal.

Thus, the president's immigration proposal is not coherent.

I put the argument in premise/conclusion format so that you can more clearly see the way I turned a fallacy with an irrelevant premise into an argument with relevant premises. For example, if a document has typos and poorly-worded sentences, then that is directly relevant to its lack of coherence. The same goes for the second premise.

But wait, is it *true* that the immigration proposal is filled with typos? Is it *true* that immigration experts couldn't understand it? It doesn't matter, because we are only thinking about *what it would take* to make it an argument. This means that we can make up premises that, if true, would support or prove the conclusion. And that's exactly what I did when I created the prior argument.

Let's look at one last example. Consider the following irrelevant conclusion fallacy: "Eating foods with too much sugar can cause health problems. But you can't worry about your health all the time." This is a fallacy because the speaker begins by addressing the relationship between health and sugar consumption, then diverts the conversation to *worrying* about one's health. Maybe we shouldn't worry about our health too much to be happy, but that's a different issue than the one raised by the first sentence in the passage. Whereas in the prior example we added new premises, in this example we will add a new conclusion as well as a new premise. So the argument would look like this:

1. Eating foods with too much sugar can cause health problems.

2. Ice cream has a lot of sugar.

So let's not keep ice cream at the house any more.

Now it's an argument, because the new conclusion and premise fit the original premise. The claim that foods with too much sugar can cause health problems, and the claim that ice cream tends to have a lot of sugar, both support the claim that we shouldn't keep ice cream at the house.

Major Ideas for Relevance Fallacies

Although anything from the readings or homework might appear on the assessments, the following **major ideas** should be clearly understood. In this case, the major ideas are fallacies with their specific variations included, if any.

- Ad hominem
 - Poisoning the well
 - Genetic fallacy
- Straw man
- False dilemma
 - Perfectionist fallacy
 - Line-drawing fallacy
- Misplaced burden of proof
 - Appeal to ignorance
- Begging the question (reasoning in a circle)
- Appeal to emotion
 - Scare tactics
 - Outrage
 - Wishful thinking
 - Pity
 - Apple polishing
 - Guilt trip
- Irrelevant conclusion (red herring or smoke screen)