3.4 (part 1) Fallacies of Presumption

A good argument is one where the premises provide independent evidence for the conclusion (i.e., the thing to be proved). In this section, we will look at several types of arguments where the premises do NOT provide INDEPENDENT evidence for the conclusion. Each of these **fallacies of presumption** has premises that assume one of the very things that is supposed to be proved in the conclusion.

1. Begging the Question: This occurs when the very thing to be proven in the conclusion (or some crucial bit of evidence which supports it) is already assumed to be true at the outset of the argument. This can occur in one of three ways:

a) Missing Key Premise: Often, arguments that beg the question come in the form of **enthymemes**, where the crucial premise is left out.

For instance:

> "Obviously, logic should be removed from the curriculum because it's a really difficult subject."

We can re-write this argument as follows:

1. Logic is a difficult subject.
2. Therefore, logic should not be taught.

But, this is a bad argument because it leaves out a crucial premise. Namely:

1. Logic is a difficult subject.
2. **Difficult subjects should not be taught.**
3. Therefore, logic should not be taught.

Premise 2 has been left out—but this is a really crucial premise. Without it, the argument fails. This argument "begs the question" because it leads us to ask, "Yes, but why do you think that difficult subjects should be removed from the curriculum?" Without a good answer to this question, the argument proves nothing.

b) Conclusion Restates the Premise: Begging the question also occurs whenever the conclusion says basically the same thing as the premise(s). This gives the illusion that something has been "proved", when in reality it is merely the case that the same thing is being said twice in a row.

For instance:

> "Prostitution is clearly wrong because any case of selling sex is morally impermissible."

This is a bad argument because the conclusion (that prostitution is wrong) is not really saying anything different than the premise which "supports" it (that selling sex is wrong). It "begs the question" because this "argument" leads us to ask, "But, what makes selling sex wrong?" And this question has not been answered.

Note: Technically, an argument does NOT commit a fallacy just because the conclusion re-states the premise. For instance, the following argument contains no fallacy:

1. *All dogs are mammals.*
2. *Therefore, all dogs are mammals.*

Though the conclusion DOES just re-state the premise, there is no attempt made to HIDE or DISGUISE this fact. "Begging the question" involves creating the ILLUSION that the conclusion is NOT merely re-stating the premise.

c) Circular Reasoning: Finally, begging the question occurs whenever the argument is "reasons in a circle". This is when a chain of inferences, or several steps, reasons in such a way that the last step ends up proving the initial assumption (i.e., the first step). We call this "circular" reasoning.

For instance:

> "Clearly, the Bible is the word of God. After all, it says in the Bible that it is the word of God, and God never lies, so the Bible contains only truths and is the word of God."

There are several claims being made here, but they all seem to support each other in an intertwined, self-enclosed circular chain of reasoning. The claims in the Bible are being used here to support the claims in the Bible. This begs the question, "Where does this chain of reasoning begin?" The circularity can be boiled down as follows:

> PEGGY: "How do we know that everything in the Bible is true?"
> SUE: "Because it SAYS it's all true."
> PEGGY: "But, how do we know that the Bible is telling the TRUTH when it SAYS it's all true?"
> SUE: "Because everything in the Bible is true."
> PEGGY: "But, how do we know that everything in the Bible is true?"
> SUE: "Because it SAYS it's all true."

We can see that this argument could go around and around in a circle forever. We can imagine a tired parent trying to ward off the questions of a child in a similar way:

CHILD: "Why is the sky blue?"
PARENT: "Because I said it's blue."
CHILD: "But, why do you say it's blue?"
PARENT: "Because the sky IS blue."
CHILD: "But, why is the sky blue?"
PARENT: Because I SAID so!"

The premise relies on the conclusion, and the conclusion relies on the premise here. They are not INDEPENDENT of one another. A good argument, however, will not use the very evidence that is being questioned as evidence for itself. In the Bible example, for instance, a good argument will need to bring in INDEPENDENT, OUTSIDE evidence in order to support the claims being made. For instance, theologians will often point to historical or archaeological evidence which supports the claims being made in that text, or else to personal religious experiences which verify the claims being made there.

2. Complex Question: This is when a question is proposed as if a "yes" or "no" or some other short or one-word answer would suffice, when a longer, clarifying answer is actually needed. This is due to the fact that the question being asked is actually TWO questions disguised as one. For instance:

"When did you decide to stop beating your children?"

Or:

"Where did you bury the body parts of your victim?"

We (hopefully!) want to answer "Never!" to the first question and "Nowhere!" to the second. However, if we say "Never!" to the first, this implies that we STILL ARE beating our children. Similarly, if we say "Nowhere!" to the second, this implies that the body parts of our victim ARE NOT BURIED YET.

These misleading implications are derived from the fact that each of the above questions are actually TWO questions in disguise. The first SHOULD say:

"Did you ever beat your children? If so, when did you stop?"

Meanwhile the second question SHOULD say:

> "Did you murder the victim? If so, where is the body?"

We must be careful not to word questions in such a way that multiple, unspoken implications are being made. This will result in bad reasoning.

3. False Dichotomy: This occurs whenever someone presents two options as if they were the ONLY two options (though they are not), and then, after eliminating ONE of them, concludes that the second option must be true. For instance:

> "Either you'll go out on a date with me, or you clearly hate my guts. But, I know you don't hate my guts."

Or:

> "You're either against Obamacare, or you're an evil person. You don't want to be an evil person, do you?"

In the first example, the implication is that the listener should go on a date, because the only alternative is that they hate the speaker. But, it is possible to not want to date someone AND not hate them at the same time. This is a false dilemma.

In the second example, the implication is that the listener should be against Obamacare, because the only alternative is to be an evil person. But, it is possible to support universal health care AND not be an evil person at the same time. Again, this is a false dichotomy, because there are OTHER alternatives than the two presented.

See here for Bush's False Dichotomy, where he suggests that Americans are either supporters of the war in Iraq or else they are terrorists. No one wants to be labeled a terrorist, so those who do not perceive that they are being presented with a false dichotomy will be led to believe that they must support the war on terror. It is, however, possible for someone to be anti-war and anti-terrorism at one and the same time.

Note: The FORM of the arguments given here are valid. What makes them fallacious is that the two options being presented are being presented as if there are no other alternatives, even though there ARE other alternatives. But, consider the following:

1. *Either Los Angeles is either in Colorado, or it is not.*
2. *None of the towns in Colorado are called "Los Angeles".*
3. *Therefore, Los Angeles is not in Colorado.*

The argument just given (like the others stated above) is valid, but it is ALSO SOUND. This is because it DOES provide us with two options which REALLY ARE our only two options (Either Los Angeles IS in Colorado, or it is not), and so the premises are both true.

4. Suppressed Evidence: This occurs when an argument purposely leaves out or ignores relevant evidence because that evidence would cast doubt on the conclusion being offered.

> "I would be a great employee. You should hire me. I graduated magna cum laude with a degree in business from Harvard, I know about all of the procedures, and I have extensive experience in this line of work."
>
> (Information not provided: "I was fired from my last job for being a terrible employee")

Or:

> "England has very strict gun control laws and the homicide rate there is very low. Meahwhile, the United States has much looser gun control laws and the homicide rate is much higher. So, the evidence indicates that we should regulate guns more strictly in order to lower the homicide rate."
>
> (Evidence that is not provided: "Mexico has much stricter gun control than the U.S., but very high homicide rates. Meahwhile, Switzerland has very lax gun control, and very low homicide rates."

The evidence in red is left out because it would undermine the conclusion in both cases. This fallacy is sometimes called "cherry-picking" or "picking and choosing", because the presenter only selects the evidence that supports their conclusion while leaving out the evidence that contradicts or undermines their conclusion.

Though pharmaceutical companies are required to list the negative side-effects of their drugs, a form of this kind of deception is often committed by drug ads, in that the negative side-effects are listed very quickly, or in very small print, or in a way that downplays the negative features; e.g., in this ad for Celebrex, where a list of terrifying side-effects are listed in passing, but while the viewer is being distracted by pictures of people having a great time. *(Note: Several other fallacies are possibly being committed here as well, including the **bandwagon fallacy**, "It's the #1 prescription arthritis medicine!"; an emotional **appeal to the people**, with a constant stream of pictures of happy people; and a **hasty generalization**, showing just a few people who have benefited from the drug and implying that everyone will benefit from it)*

3.4 (part 2) Fallacies of Ambiguity

In this section, we will look at two examples of fallacies that are caused by **ambiguity**. We learned about ambiguity in section 2.1. Terms are ambiguous when it is unclear how to interpret them. This can lead us to draw erroneous conclusions from given premises.

1. Equivocation: This occurs whenever a single term is being used in two different ways within an argument. For instance:

> "The pamphlet for this animal rescue organization says, 'All former zoo animals are now free'. I think we should go get a free koala bear. After all, they're just giving them away!"

The term being equivocated on is the term "**free**". Here, the speaker has drawn the conclusion that the "free" animals are being given away at no charge, when the pamphlet really means that the "free" animals are no longer confined to cages. Here's another example of an argument guilty of equivocation:

> "Everyone knows that it is wrong to discriminate, or treat people differently on the basis of what race they are a part of. So, even though the 100 meter dash and the long-distance marathon are different races, it is clear that we should hold the members of each to the same set of standards."

Here, of course, the term "**race**" is being used in two different senses.

2. Amphiboly: This occurs whenever an ambiguous statement, which could be interpreted in different ways, is interpreted in the WRONG way in order to support some conclusion. For instance:

> "This newspaper headline says, 'Local Children Make Nutritious Snacks'. I can't believe they're eating children now!"

> "They say that Peggy gave a lecture on drugs yesterday. I had no idea she was a junkie!"

In the first case, the likely interpretation is that the children are the ones making snacks (not that the children ARE the snacks). In the second case, the likely interpretation is that Peggy's lecture was ABOUT drugs (not that she was ON drugs). In both cases, a conclusion is drawn based on the WRONG interpretation, so the fallacy of **amphiboly** is committed in both cases.

3.4 (part 3) Fallacies of Grammatical Analogy

In this section, we will look at cases which draw mistaken inferences from the parts of something to the whole, or from a whole to its parts. These will be labeled as fallacies of **grammatical analogy**.

1. Composition: This occurs when someone mistakenly assumes that, just because all of the PARTS of something have some feature, that the whole must ALSO have that feature. In the lecture for section 3.1, I mentioned someone mistakenly inferring from the fact that you can't build a sand castle out of a single grain of sand, that you ALSO couldn't build a sand castle out of an entire beach of sand. Here is another example of this fallacy:

> "If you like cheese, bread, and tomatoes, then you'll like pizza."

Or:

> "Human beings are made of atoms, and atoms aren't conscious. So, human beings aren't conscious either. Consciousness is an illusion."

The first argument is actually one I gave to my grandpa many times. He hated pizza, and I was always baffled, because he loved all of the individual ingredients. The second argument is one proposed by several philosophers in an attempt to demonstrate that there is no such thing as the mind, or the soul. Both examples infer that the WHOLE is some way or other, just because all of its PARTS are that way. But, this inference is fallacious in these cases.

2. Division: This occurs when someone mistakenly assumes that, just because a WHOLE has some feature, that all of its parts must ALSO have that feature. For example:

"The Green Bay Packers have been playing since 1919. Wow, I can't believe Brett Favre has been playing football since 1919!"

Here, the speaker assumes that, just because a TEAM has been around since a certain time, that all of the individual PLAYERS have ALSO been around that long. Here are some other examples:

> "Since the Mona Lisa is a beautiful painting, it follows that each individual atom of paint in the Mona Lisa is beautiful too."

> "They say that the United States is a very wealthy nation. So, obviously Sue was lying when she said she was poor. She's an American citizen, after all."

In the first example, the speaker assumes that, just because the WHOLE painting is beautiful, that its parts are beautiful too. In the second, the speaker assumes that, just because the NATION is rich, that all of its citizens are too. Both of these inferences from the whole to the parts are fallacious.

Note: Keep in mind that there ARE instances where these sorts of inferences are NOT fallacious.

Composition: From Parts to the Whole: *It IS often the case that things made out of parts have certain traits that ALL of the parts have. For instance, if every part of a bicycle is blue, then the entire bicycle is ALSO blue. Or, if every molecule in a liquid is water (H_2O), then the WHOLE body of liquid is ALSO water.*

Division: From a Whole to its Parts: *Similarly, it IS often the case that the parts of something all have certain traits that the whole has. For instance, if a WHOLE table is 100% wooden, then all of the PARTS of the table are ALSO wooden (at least down to the cellular level).*

Note: Do homework for section 3.4 at this time.