3.1 Introduction to Informal Fallacies

1. Introduction: For the next few weeks, we will be studying **informal fallacies**. A fallacy is a defect in an argument—i.e., something which causes the argument to be unsound—but the defect is anything OTHER than merely having false premises.

<u>Defective, But No Fallacy Committed:</u> For instance, here is an example of a defective argument that does NOT commit any fallacies:

1. All ducks are rabbits.
2. All rabbits are mammals.
3. Therefore, All ducks are mammals.

The ONLY reason that this argument is unsound (defective) is that premise 1 is false.

<u>Defective; Commits Formal Fallacy:</u> Contrast the above with the following:

1. All dogs are mammals.
2. All cats are mammals.
3. Therefore, All dogs are cats.

This argument is defective, not because its premises are false (they're true!), but because it does not have the right FORM. We can reduce the argument above to the following:

1. All D are M
2. All C are M
3. All D are C

The middle term is undistributed in both premises, so this AAA-2 syllogism is **invalid**, and commits the **fallacy of undistributed middle**. This is a **formal fallacy**, because we do not need to look at the actual CONTENT of the argument to see that a mistake is made. We only need to look at the FORM of the argument to see that it is mistaken.

<u>Defective; Commits Informal Fallacy:</u> Contrast the above with the following:

1. No grains of sand are things you can build sand castles out of.
2. All beaches are grains of sand.
3. Therefore, no beaches are things you can build sand castles out of.

This is a valid argument form (EAE-1). And, technically, both premises are true (though premise 2 is worded somewhat strangely). Nevertheless, something a bit weird is happening here. Clearly the argument is defective, but why? Well, the argument is assuming that what is true of the PARTS of something must also be true of the WHOLE. This assumption is false.

For instance, your textbook points out that bridges are visible to the naked eye, even though it is made of parts that are invisible to the naked eye (i.e., atoms). The argument above assumes that, because you can't build sand castles out of SINGLE grains of sand, you can't build sand castles out of MANY grains of sand either—but that is false. This particular fallacy committed here is one we will learn later; it is called the "Fallacy of Composition". It is an **informal fallacy**, because we cannot simply determine that the argument is flawed MERELY by looking at the FORM of the argument. Rather, we must look at the actual CONTENT of the argument to see that it is defective. When this is true of an argument, the fallacy committed is an informal one.

Note: Do homework for section 3.1 at this time.

3.2 Fallacies of Relevance

In this section, we will look at the sorts of fallacies where the premises have no LOGICAL connection to the conclusion—but, they are posed in such a way that the premises SEEM to be connected to the conclusion. In short, the fallacies in this section are ones where the **premises are not relevant to the conclusion** (though this fact is disguised).

Note: Many of the fallacies in this unit have Latin names (e.g., "argumentum ad hominem"). I will include these, but you will not need to memorize them.

1. Appeal to Force (argumentum ad baculum): This fallacy is committed whenever the person giving the argument in some way THREATENS the listener, and this threat is the reason supplied for why the listener should believe the conclusion (rather than some premises that are actually relevant). In short, the **Appeal to Force** fallacy is one where a threat REPLACES evidence. For instance:

    "I'm the best man for the job. Anyone who says otherwise is in for a world of hurt."

Here, the conclusion of the argument is that the speaker is the person who is best suited for the job. The speaker is trying to convince his listeners to agree. But, no relevant EVIDENCE is supplied in order to convince them. Rather, the thing that is "convincing" the listeners to agree is that they will be beaten up if they disagree.

Consider another example:

"I guess you WILL be testifying that I am innocent tomorrow. After all, neither of us wants anything to happen to your children, do we?"

The conclusion that the speaker is trying to get the listener to believe is that the speaker is innocent. However, the "evidence" supplied to support this conclusion is merely a threat to the well-being of the listener's children (rather than any actual relevant evidence).

Because a threat is given to support the conclusion, rather than any relevant evidence, both of the above "arguments" commit the fallacy of "**Appeal to Force**". Sometimes, this is used in advertising. "Buy this, or you will regret it!" Or, how about this one for an item called Panda Cheese: [Never Say No To Panda](#)!

2. Appeal to Pity (argumentum ad misericordiam): This fallacy is committed whenever someone tries to support a conclusion by evoking pity, rather than by supplying evidence which is actually relevant to the conclusion. Just as the threat replaces the evidence in the "Appeal to Force" fallacy, here, the pity evoked in the listener replaces the evidence in the "Appeal to Pity" fallacy. For example:

Student to Professor: "But, I really NEED to pass this class. I need this class in order to graduate this semester, and I can't afford to pay for more classes in the future. I already work 60 hours a week and supporting four children all by myself, and I'm barely scraping by as it is. You should give me a passing grade."

Here, the conclusion is that the professor should give the student a passing grade. However, no actual evidence is given that is relevant toward supporting this conclusion. Instead, what the student does here is try to evoke SYMPATHY in the professor, so that the professor will have pity on the student and give them a passing grade even though they did not earn one.

Because an appeal to pity is given to support the conclusion, rather than any relevant evidence, this "argument" commits the fallacy of "**Appeal to Pity**". Here is an example of a commercial, the conclusion of which is "You should buy Pedigree dog food", but the only reason supplied for doing so is an appeal to your pity for dogs in pet shelters. Watch the video here: [Pedigree dog food commercial](#)

Note: This is not to say that the sentiment of compassion or pity can NEVER be relevant to a conclusion. For instance, consider the following:

Student to Professor: "I would really like to get an A for the attendance portion of the grade. I was in my car last week and I was hit by a drunk driver. I've spent the last several days in the hospital on a lot of painkillers. Please, will you excuse my recent absence from class?"

Here, the student is citing an unfortunate scenario that DOES evoke sympathy, but the sad story being told is RELEVANT to the conclusion (that the professor should not penalize the student for being absent from class). The events of the story DO support the conclusion in this case—NOT because they cause the professor to take pity on the student, but rather because they demonstrate that the student's absence was completely outside of his control, and therefore not grounds for being penalized (For, it is commonly believe that no one should be blamed or penalized for something that was not their fault, or something that they could not have avoided).

3. Appeal to the People (argumentum ad populum): This fallacy is committed whenever the cause of the listener's acceptance of the conclusion is that they are made to feel like they are a PART OF something special (that they admire, value, envy, etc.), or else because they WANT to be a part of something special. In short, the speaker in some way APPEALS to the listener, or else makes the conclusion sound APPEALING.

This appeal can be **direct**, or **indirect**. Furthermore, there are THREE ways that one can appeal to their listener indirectly. Let's examine all four of these fallacies in turn:

(a) **Appeal to the People (direct):** This occurs whenever the speaker DIRECTLY appeals to, or excites the emotions of the listener(s), and this excitement is what causes the listener(s) to accept the conclusion being endorsed by the speaker.

For instance:

Speaker: "Vote for my candidate! Vote for AMERICA! Everybody say 'Yeah'!"
Crowd: "Yeah!"
Speaker: "I can't hear you! I said, *Everybody say 'Yeah'*!"
Crowd: "YEAH!!"

Here, the crowed is being "hyped up" or *manipulated* by the speaker. The crowd is compelled to agree, not because any actual evidence is supplied for why they should agree, but MERELY because they are being swept up in the excitement of the moment. Entertainers, athletes, politicians, and religious leaders are common culprits of this fallacy.

Groups of people can easily get caught up in a "mob mentality" when they are appealed to in some way. Sometimes, this can be as simple as complimenting the crowd (e.g., "You people look beautiful tonight!") to gain their agreement or affirmation. Other times, one might say something that they know their crowd is likely to strongly agree with (even if totally irrelevant), in order to gain their affirmation, as happens here: Bill & Ted's Excellent Adventure

There are three ways that one can appeal to their listener(s) **IN**directly:

(b) **Appeal to the People (indirect; Bandwagon Argument):** This occurs whenever the speaker implies to the listener(s) that they will be left out or left behind if they do not agree with the speaker. Usually, this involves pointing out that "everyone else is doing it/believes it".

For instance:

"Really? You don't own a car? But EVERYONE owns a car."

Here, the speaker is trying to get the listener to accept the conclusion that she should own a car. But, rather than supplying relevant evidence for this conclusion, the speaker merely appeals to the fact that other people have already made that same conclusion for themselves—and the listener should jump onto the bandwagon and join them! This tactic is often used in advertisements; for instance, it is used in this one for AT&T. "Don't be left behind!"

(c) **Appeal to the People (indirect; Appeal to Vanity):** This occurs whenever the speaker associates the conclusion they are putting forward with some desirable person or feature. This puts in the listener's mind the idea that, if they believe the conclusion, they will be JUST LIKE this desirable person, or they will HAVE this desirable feature too!

For instance:

• "You should buy a Ferrari. That's what Tom Cruise drives."

• Or, in advertisements, products are often associated with other (totally unrelated) desirable features, like beauty, adventure, talent, etc. The implication is that, if you buy this product, YOU TOO will have all of these amazing qualities. See, for instance, this ad by Old Spice.

In the above, rather than supplying evidence for the conclusion (that you should buy a Ferrari or that you should use Old Spice), these conclusions are instead merely associated with something or someone who is admired or desirable. Because they now associate the conclusion with this desirable person or thing, this causes the listener to be more likely to accept the conclusion.

(d) **Appeal to the People (indirect; Appeal to Snobbery):** This occurs whenever the speaker associates the conclusion with being in an elite class, or a lucky member of a select few.

For instance:

"You should accept the offer at the summer internship. How many people actually get accepted into that program? SO many apply, and only a few get in. You've got a one in a million opportunity right in front of you—I can't believe you're even considering turning it down."

In this passage, rather than supplying evidence for the conclusion (that the listener should accept an offer for an internship), the speaker is merely referencing how ELITE or RARE getting into the internship is. This makes the listener more likely to accept the conclusion, because it appeals to their sense of wanting to be a member of the elite. This strategy is sometimes used in marketing as well. For instance, this famous ad for Grey Poupon implies that if you use their mustard, you will be a part of a very elite and special group.

4. Argument Against the Person (argumentum ad hominem): This fallacy is committed whenever someone, rather than providing EVIDENCE for their view, merely resorts to attacking their listener instead.

(a) **Argument Against the Person (Abusive):** This occurs when one person, rather than supplying REASONS for why their opponent is wrong, instead resorts to directly verbally abusing the other.

For instance:

PEGGY: "I think you should slow down a little bit."
SUE: "Well, you're an idiot."

In this dialogue, Sue rejects Peggy's conclusion (that Sue should slow down). But, Sue does not provide any REASONS for rejecting that conclusion. Instead, she simply resorts to verbally insulting Peggy. See also "reason #1" given by the shoulder devil in this cartoon clip of [Disney's Emperor's New Groove](#).

(b) **Argument Against the Person (Circumstantial):** This occurs when someone, rather than supplying REASONS for why their opponent is wrong, instead resorts to pointing out circumstances that make it MORE LIKELY that their opponent would be asserting the conclusion that they are asserting. This fact that we'd EXPECT someone in those circumstances to say just what they're saying is somehow supposed to make their conclusion false.

For example:

"Of COURSE my opponent is arguing against taxation of the rich. Just look at him! He's the richest person in town. There's no way someone like that could argue anything else."

While it may be true that people often DO believe things MERELY out of self-interest (for instance, rich people are more likely to be against taxation of the rich), this fact ALONE does not demonstrate that the argument being presented for that conclusion is unsound. To show that an argument is unsound, it needs to be refuted on its own terms (it is not refuted merely by explaining that the person PRESENTING the argument may be biased).

Note: Sometimes, it IS rational to dismiss someone's TESTIMONY when we know that they are pre-disposed (or, have some self-interested reason) to say what they are saying. But to dismiss someone's CLAIM is different than dismissing someone's ARGUMENT. For instance, consider a case of a child who has just eaten all of the cookies:

Mother: "You'd better not have eaten any cookies before dinner, or you're getting a spanking."
Child: "I didn't do it."

Here, we might say, "OF COURSE the child is going to deny eating the cookies. She doesn't want to be spanked!" In these particular circumstances, the child has a very good reason for lying. So, we might have grounds for dismissing her claim of innocence. But, in order to dismiss an ARGUMENT, we must show what is wrong with the ARGUMENT ITSELF.

(c) **Argument Against the Person ("You Too", *tu quoque*):** This occurs whenever someone, rather than supplying REASONS for why someone is mistaken, instead merely tries to make that person seem like a hypocrite.

For instance:

PEGGY: "You shouldn't eat fast food. I hear it's really bad for you and could lead to health complications."
SUE: "Whatever! You eat fast food all the time!"

Here, rather than addressing Peggy's actual claims, Sue merely attempts to turn Peggy's argument back onto herself by calling Peggy a hypocrite. Or, consider this example, which is an attack against [Al Gore](). Al Gore has famously argued for reducing our greenhouse gas emissions to stop climate change. But, many have responded by pointing out that he himself emits more greenhouse gases than the average person—i.e., they point out, "but, you're guilty of doing it too!"—without actually addressing his ARGUMENT.

5. Accident: General rules often have exceptions. This fallacy is committed whenever someone mis-applies a general rule to one of the cases that is an exception.

For instance, imagine a lost child:

POLICE OFFICER: "Are you lost? Where's your Mom and Dad? Talk to me."
CHILD: "I can't talk to strangers."

Or imagine someone being asked to protest the government:

SUE: "We need to do something about this. Protest. Maybe even revolution!"
PEGGY: "But, we should always obey the law and respect the government's decisions."
SUE: "Yeah, but they just executed an innocent person on the White House lawn."

In the first case, the child comes to the conclusion that he should not speak to the police officer—not realizing that this particular scenario is an exception to the rule to not talk to strangers. In the second case, Peggy comes to the conclusion that she should not protest the government's decisions—not realizing that the general rule to obey the law should be broken in the event that the government becomes so morally depraved that they would be willing to publicly execute innocent people.

6. Straw Man: This fallacy is committed whenever someone, in order to attack an opponent, attacks some WEAKER, DISTORTED VERSION of their opponent's argument, rather than the actual argument the opponent is giving. This often involves twisting an opponent's words to be saying something much more absurd or ridiculous than they are actually saying. This ridiculous claim is much easier to refute, and (once it is refuted), the speaker then concludes that they have refuted their opponent's ACTUAL argument.

For instance:

PEGGY: "I'm just saying that nuclear energy would provide a lot of energy in a clean way, so we should at least consider it as an option."
SUE: "Oh, so you're in favor of nuclear war? Is that what you want? For all of the countries to be nuking each other until we're all dead? How ridiculous!"

Here, Sue has concluded that Peggy's stance is ridiculous, but only by accusing Peggy of proposing something VERY different (albeit loosely related) to the actual proposal that she is making. Just as a "straw man" is much easier to knock down than a REAL man, the distorted, ridiculous version of Peggy's view is much easier to knock down than her ACTUAL view. After knocking down this "straw" version of Peggy's view, Sue then mistakenly assumes that she has shown Peggy's ENTIRE POSITION to be ridiculous—thus committing the "**Straw Man**" fallacy.

Or, consider this comic which "straw mans" Obamacare, accusing it of being a proposal for "death panels" which will decide whether patients live or die:
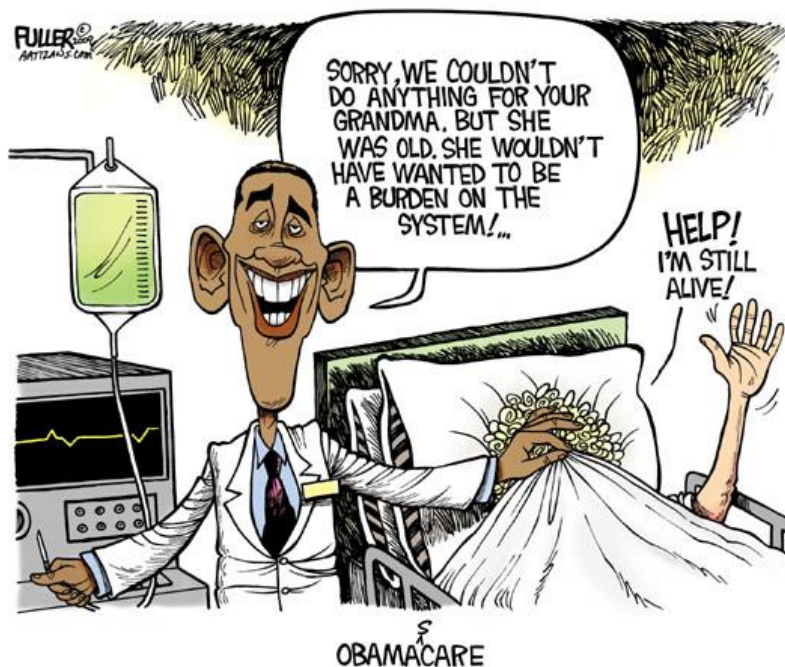
7. Missing the Point: This fallacy is committed whenever someone takes certain premises which support ONE particular conclusion, and—rather than draw THAT conclusion—they instead draw a DIFFERENT (but somewhat related) conclusion instead; and it is one which the premises do NOT support. The fact that the mistaken conclusion is loosely **related to** the real conclusion that the premises ACTUALLY support often makes the mistake persuasive and difficult to detect.

For instance:

> "Our daughter got all D's this semester at CU. Every single professor there should be fired!"

The evidence (that this student got D's in every class) most likely support the conclusion that she should study harder, or hire a tutor, etc. The evidence does NOT support the conclusion that ALL of the professors (even the ones whom she did not take classes with!) should be fired. The parent speaking here has failed to take the evidence where it actually leads, and has instead concluded something that the premises do not support.

Or, here is a common one:

> PEGGY: There is so much welfare corruption! They found out that some people are using welfare checks for drugs and gambling.
> SUE: I know! We should just get rid of the welfare program!

The fact that some abuse the welfare system does not entail that the entire system should be abolished. Rather, at best, it points to the need for reform and stricter regulations that would prevent such abuse.

8. Red Herring: This fallacy is committed whenever someone responds to their opponent by changing the subject to something completely different. Sometimes, the different topic can be loosely related to the actual topic that was being debated. When this happens, red herrings can be misleading in a very subtle way that is difficult to detect. For instance:

> PEGGY: "The scientific community is in unanimous agreement. We are altering the climate, and if we continue on our present course, the results will be disastrous. Climate change is a real problem in this world."
> SUE: "You know what's a problem in this world? People just believing everything they hear. People will believe just about anything, as long as it's said on television."

In this example, rather than address the actual claims being made by Peggy, Sue *changes the subject* from climate change to the gullibility of people who watch television. Not only does this new topic fail to address the actual claims that Peggy is making, it is likely to re-direct the entire conversation because it in some ways SEEMS to be relevant to the topic that was originally brought up. However, the new topic is a **red herring**.

As another example, consider this political ad which re-directs attention from the topic of the economy to pointing out how many houses Obama's opponent has: [Obama Against McCain](#).

Note: Do homework for section 3.2 at this time.