I. What is an Argument?

In philosophy, an **argument** is *not* a dispute or debate; rather, it is a **structured defense of a claim** (statement or assertion) about some topic. When making an argument, one does *not* merely state what they think is a good answer to a particular philosophical question (that would be just to give one's *opinion* on the matter). Instead, one *explains why* their answer is a good answer. Ideally, one also explains why their answer is a better answer to that question than any alternative views.

To make an argument, you must 1) *choose a claim to defend*, and 2) *provide at least one **reason** in support of that claim*.

> When you state a reason in the form of a **proposition** (a phrase that can stand alone as a sentence), it is called a **premise**.
>
> The claim you are defending is called the **conclusion** of the argument, because it is supposed to be the result of the reasoning you provide in its defense.
>
> So: *an argument must include at least one premise and a conclusion*.

A claim by itself is *not* an argument. For example,

A. Barack Obama is the best president the U.S. has ever had.

B. Each of us possesses a soul that outlives our body.

C. Dogs are better pets than cats.

…are *not arguments*, but merely *claims*, since they are not accompanied by any premises, which would give reasons to believe that claim is true. If we add premises in support of these claims (written in *italics*), they become arguments:

A*. Barack Obama is the best President the U.S. has ever had, given that *he made affordable healthcare insurance available to all Americans*.

B*. Each of us possesses a soul that outlives our body, because *the says so*.

C*. Dogs are better pets than cats, since *every dog I have ever encountered has been friendly*.

…but not necessarily *good* arguments. As I will explain further in section IV ('Evaluating Arguments'), just because an author has provided a premise in defense of their conclusion doesn't mean that 1) the premise actually *does* support their claim, or 2) the premise is a philosophically-acceptable type of reason to accept a conclusion.

II. Identifying an Author's Argument

Some authors make it *very* clear what the premises and conclusion of their argument are – even going to the trouble to label them with numbers, letters, or names, and/or indenting them on separate lines of the paper, so they are easy to identify. But in other philosophical works, the premises and conclusion might be buried within the author's writing, or not stated very succinctly. Fortunately, authors often signal premises and conclusions with particular key words that come immediately before, which we can call *premise-flags* and *conclusion-flags*. It's helpful to familiarize yourself with these so you can easily identify an author's premises and conclusions

➔**Premise-flags:** ***because***, ***since***, ***given that***, ***for*** (and synonyms of these words)

➔**Conclusion-flags:** ***thus, therefore, hence, it follows that, so, consequently***

Let's look at how this works in some simple sample arguments:

Because euthanasia is murder, it is always morally wrong.
PREMISE CONCLUSION

Affirmative action is a just policy, **since** it corrects for inequality of opportunity.
CONCLUSION PREMISE

Creationism conflicts with evidence for evolution, **so** creationism must be false.
PREMISE CONCLUSION

I pinched myself and felt it, **therefore** I must not be dreaming right now.
PREMISE CONCLUSION

It is often helpful to summarize an author's argument for yourself, by singling out the premises and conclusion and writing them in order on separate lines. The conventional way to do this is to *stack the premises on top of solid line, and write the conclusion underneath*. For example:

1. If you study philosophy, then your critical thinking skills will improve.
2. If your critical thinking skills improve, then you're more likely to get a high score on the LSAT, GMAT, GRE, etc.
3. Therefore, if you study philosophy, you're more likely to get a high score on the LSAT, etc.

The premises (1 and 2) are listed above the line, and the conclusion they are meant to support (3) goes below the line.

III. Main vs. Auxiliary Arguments

Any philosophical work will have a **main argument** defending the author's *central conclusion* – which is basically the work's *thesis statement*.

If an author feels that a reader may not automatically agree that one of the premises in the main argument is true, or that it is a good kind of premise, they may need to provide an **auxiliary argument** (an additional, supplementary one) in defense of that premise. Jim Pryor explains how this works as follows, using the letters A, B, and C to stand in for different claims:

> "…[an] author's discussion may have the form:
>
> > The conclusion I want you to accept is A. My argument for this conclusion is as follows: B and C are true, and if B and C are true, then A must also be true. It is generally accepted that B is true. However, it is controversial whether C is true. I think you ought to accept C for the following reasons...
>
> Here the author's main argument is for the conclusion A, and in the process of arguing for A he advances an auxiliary argument in support of C." (2006, 1)

In Pryor's example, the author's main argument supports conclusion A using premises B and C. But since not everyone might accept C as obvious fact, the author supports C with an *auxiliary argument*, which would use a new set of premises (say, D and E) and have C as its conclusion. (Note that any given claim can serve as a premise in one argument, but as a conclusion in another argument.)

IV. Evaluating Arguments (Part I)

One of your duties as a philosophy student is *not to take anything an author says for granted*. Instead, you must take a *critical stance* while reading and listening to arguments, and pay careful attention to the reasoning an author uses to support their conclusion.

The arguments we will be focusing on in this class will mostly be **deductive arguments**, which intend to support a conclusion by supplying premises whose truth *guarantees* that the conclusion is true.

(In contrast, **inductive arguments** intend to support a conclusion by supplying premises whose truth *make it more likely, but do not guarantee* that the conclusion is true. E.g., the truth of the premise "every swan I have ever seen was white" *makes it likely, but does not guarantee* that "all swans are white" is true. It could be a total fluke that you never happened to encounter a swan that wasn't white – and in fact this was the case for many people, until *black* swans were discovered in Australia in 1697. This goes to show that *experience is not necessarily a reliable guide to what's true in reality*: that's called **the problem of induction**.)

A **good (deductive) argument** gives us adequate reason to believe that its conclusion is true (or at least, a better answer to a certain question than some other answer). It supports its conclusion well because:

I. its premises are worthy of our belief,
II. its premises are true, and
III. its conclusion follows logically from the truth of the premises.

There are a *lot* of ways for an argument to fail to meet those three criteria. Let's first consider how an argument could fail criterion I.

Premises are worthy of our belief when they a) use good logic and b) 'play by the rules' of rhetoric (that is, argumentative language). A premise that either uses bad logic or breaks one of the rules of rhetoric is **fallacious –** or in other words, **commits a fallacy.**

There are dozens of fallacies (see *http://bit.ly/philfallacies* for a very comprehensive list). Lt's get acquainted with some of the most frequent ones, organized into rough categories on the basis of what they do wrong. Examples of each are given in italics. Try to come up with some examples of your own!

Information Manipulations misrepresent the facts at hand to try to convince readers of something that is not necessarily true.

Hasty Generalizations (including Stereotypes) draw conclusions about an entire group after observing just a small (and not necessarily representative) sample of its members.

All Asian students are good at math. Therefore, an Asian student should manage our organization's budget.

Confirmation Bias is when an author cherry-picks their sources and pieces of evidence that confirms the view they hold, which ignoring or suppressing evidence to the contrary.

Of course cake is better than pie: not one person on cakelovers.com says they prefer pie over cake.

Slippery Slope Arguments claim that one small step will inevitably lead to much more drastic (and typically undesirable) consequences.

We can't let people of the same sex marry each other: next thing you know, people will be marrying their dogs!

Strawman Arguments misrepresent an opponent's view, making it easier to defeat.

It's ridiculous to say that all human beings are created equal: if that were true, we'd all be able to dunk like LeBron!

Off-Limits Appeals give reasons involving information that should be irrelevant to the matter at hand.

Ad Hominem Attacks criticize the author of an opposing claim, instead of criticizing the claim itself.
Voldemort says the sky is blue, but we can't trust anything Voldemort says because he's evil.

Anecdotal Evidence is an appeal to one's own limited experience, or hearsay about someone else's limited experience.
The G train is very reliable: it came right away the one time I took it.

Appeals to Authority claim something is true merely because an expert (or someone who purports to be an expert) says so.
The correct way to eat a slice of New York-style pizza is with a knife and fork: if Donald Trump says so, it must be true.

Appeals to Emotion try to convince the reader that something is true by arousing their emotions instead of appealing to their reason.
Petroleum is a terrible energy source: just think of all the cute baby sea animals that were harmed in the Gulf of Mexico oil spill!

Appeals to Tradition claim that something is correct just because it's what has always been done.
Marriage should only be between a man and a woman, because that's how we've done things for thousands of year.

Red Herrings distract the reader by introducing information that isn't pertinent to the topic at hand.
Baruch is the best CUNY college because that's the school I go to.

Logical Errors are – no surprise – errors in logical reasoning.

Begging the Question (Circular Argumentation) is when an author assumes or presupposes the truth of conclusion of their argument in the reasoning they provide in defense of that conclusion
God must exist, because nature clearly exhibits intelligent design by a divine creator.

Non Sequitur (Latin for 'it doesn't follow') is when an author draws a conclusion that simply isn't supported by the reasoning they have given to support it.
Dorothy is wearing red shoes today, so obviously red is her favorite color.

Confusing Correlation with Causation is when an author mistakenly takes an apparent relationship between two factors to support the conclusion that one of those factors must be the *cause* of the other. This is an invalid inference, because two things can be correlated without having any causal relation to one another: they could merely seem to be related due to random coincidence, or both things could be caused another unacknowledged factor.

Both ice cream consumption and crime rates go up in the summer: so eating ice cream must instigate criminal behavior. (The actual explanation for this is that higher temperatures are the cause of both increased ice cream consumption and increased crime rates; there is no direct relationship between ice cream and criminality.)

Confusing Chronology with Causation (*Post Hoc* Fallacy) is when an author assumes that since one event comes after another, the first event must have caused the second to occur. This is an invalid inference, because one event can follow another in time without there being any relationship between the two.

It rained a few hours after I performed a rain-summoning dance: so I must have supernatural rain-summoning powers!

Equivocation is when an author uses an ambiguous word (one with multiple meanings) and depends upon the word being understood with different meanings at different points in the argument.

Nightmares are a type of dream. Exams are a nightmare. Therefore, exams are a type of dream.

A common theme in many of these fallacies is that they make **unwarranted assumptions.** Here are some guidelines from Robert Todd Carroll (2015) on how to tell whether an assumption is warranted or not:

An **assumption** is *a claim that is taken for granted, for which no proof is given or argument made.* Every argument makes assumptions. It would be ridiculously tedious and unreasonable to require every assumption in every argument to be proven before proceeding. But it is not improper to require that the assumptions of an argument be warranted or, if not, stated as conditional or provisional.

A **warranted assumption** is an assumption that is either known to be true or is reasonable to accept without requiring an argument to support it. Since a good argument must be based on true or reasonable assumptions, it follows that arguments based upon false or questionable assumptions are not good arguments.

A **questionable assumption** is *one that is controversial and one for which there is no general consensus among the vast majority of those with the appropriate knowledge or experience.* A claim does not become questionable just because *you* or *anyone*

else questions it; otherwise all claims would be questionable. The contrary of a questionable assumption is *not* an *unquestionable* assumption. There truly are very few claims that are unquestionably true in the sense of not possibly being false.

How do we determine which assumptions of an argument are warranted and which ones are not? It should be obvious that many, if not most, statements can be known to be true or false only by shared experience or by studying the particular field in which the statements are made. If you want to know whether a statement about law is true, you have to study the field of law; if you want to know whether a particular statement about biology is true, you must study biology. Many of the claims we run across as we read arguments and many of the claims we make in our own arguments come from experts and authorities in fields of which we are not knowledgeable. We determine whether or not assumptions are warranted based on our knowledge, experience, the quality of the source of our information and the type of claim made.. . .

Finally, *do not consider an assumption unwarranted simply because you do not know whether it is true. Your lack of knowledge does not make a claim questionable.* Also, don't assume that just because consensus claims in science are questioned by some people that such questioning implies that the consensus claim is questionable. Just because, for example, some people believe that vaccines cause autism does not make the claim that *vaccines don't cause autism* a questionable claim. (Carroll 2015)

V. Responding to Arguments

If you identify a problem with an argument, you can raise an **objection** against it. An objection may motivate you to suggest a **revision** to the argument, where you give different premises in support of the same conclusion, and/or show that those premises actually support a different conclusion. An objection may also motivate you to pose a **counterargument,** where you argue in favor of the opposite conclusion.
Let's return to the sample arguments from page 1:

A*. Barack Obama is the best President the U.S. has ever had, given that he made affordable healthcare insurance available to all Americans.

There are many reasons why someone might disagree with this argument. For example, you might think that the author hasn't provided sufficient support for the conclusion, by not giving enough information about Obama's presidential accomplishments to guarantee that he is the best U.S. president ever. You might agree with the conclusion, but disagree that healthcare reform makes Obama our best president. Or you might disagree with the conclusion and instead endorse the opposite view.

A sample *revision* to this argument might be:

A+. Barack Obama is the best President the U.S. has ever had, given that he *expanded marriage rights and* made affordable healthcare insurance available to all Americans.

A sample *counterargument* might be:

A-. Barack Obama is *not* the best President the U.S. has ever had, given that *he has failed to curb police brutality against people of color*.

Another example:

B*. Each of us possesses a soul that outlives our body, because the Bible says so.

You might disagree with B* if you are not certain that the Bible is a reputable source of information. You might even think that the author is defending their conclusion with a fallacious *Appeal to Authority*.

Here's a possible *revision*:

B+. Each of us possesses a soul that outlives our body, because *there is no other way to explain conscious experience*.

And a *counterargument*:

B+. Each of us *does not* possess a soul that outlives our body, because *there is no verified scientific data to support the existence of souls*.

One last example:

C*. Dogs are better pets than cats, since every dog I have ever encountered has been friendly.

You might disagree with C* if you have ever encountered an unfriendly dog, which would seem to disprove the conclusion that *all* dogs are friendly. At any rate, this argument uses *Anecdotal Evidence* about the author's personal experience with dogs, and exhibits *Confirmation Bias* by only presenting evidence about dogs and neglecting any favorable traits possessed by cats.

A suggested *revision*:

C+ Dogs are better pets than cats *for people who want to make new friends*, *since dogs are generally more friendly to strangers than cats*.

And a possible *counterargument*:

C- Dogs are *not* better pets than cats, *since cats and dogs both have qualities that make them excellent pets for people with different dispositions*.

Works Cited

Carroll, Robert Todd. (2015) "Begging the Question." *The Skeptic's Dictionary*. http://skepdic.com/begging.html

Pryor, Jim. (2006) "What is An Argument?", "Vocabulary Describing Arguments", and "Some Good and Bad Forms of Argument." http://www.jimpryor.net/teaching/vocab/index.html