

Philosophical Methods

Revised June, 2020

Introduction

What is philosophy? This is a difficult question to answer well, so I'll start by saying what philosophy *is not*. Philosophy is not just speculation or free-association. "Philosophical" is not a synonym for "useless" or "impractical" or "impossible to know." Philosophy is not the exclusive province of exceptionally wise or intelligent people, and it is definitely not the exclusive province of old, white dudes with beards. (Also, philosophical questions cannot be replaced with scientific questions, but that's another conversation.)

As for what philosophy *is*, a lot of smart people disagree about that. But I think it's something like this: philosophy is the activity of trying to answer questions through close attention to the way we reason. This requires attending closely **arguments**, i.e. reasoned defenses of claims, as well as **concepts**, i.e. the categories we use to describe and understand the world, and the criteria we apply when using those categories. Cathal Woods put it another way:

Philosophy is
 thinking about
 how we should think about
 things we don't know how to think about
 (yet).

Philosophical thinking is especially useful when we do not yet have other well-established methods for thinking about particular problems. That's why philosophers specialize in abstract topics like ethics (what should we do?), epistemology (how do we know things?), and metaphysics

(what are things and what things are there?). It is also why scientists were called "philosophers" or "natural philosophers" before they were called physicists, biologists, psychologists, linguists, &c. However, philosophical thinking is also involved in the basic structure of every other academic or professional discipline, and is used at the cutting edge of every discipline, even if the people doing that thinking don't call themselves philosophers.

Three kinds of questions To get a feel for philosophical thinking, it may help to think about three kinds of questions. The **first** kind of question has a definite answer and there is an agreed-upon method for determining the answer. Questions of arithmetic (What is $68 + 57$?) or straightforward empirical questions (How old is the solar system?) are like this. It may not always be easy to find the answers to these questions, but we generally agree on what it would take to discover an answer and defend it as correct. A **second** kind of question has no definite answer. For example, is vanilla or chocolate ice cream better? People simply disagree about what they prefer; there is no right answer.

Philosophy is concerned with a **third** kind of question: questions that have answers, but no agreed-upon method for determining the answer. I stress the following point: *Reasonable people can disagree about the answer to a question and that doesn't mean there is no real answer.* For example, you might ask: If the Federal Reserve raises interest rates, will unemployment go up? There is a right answer to this question—if the Federal Reserve acts, unemployment will go up or down or stay the same. Economists have various models that take different factors into account, and can disagree with each other about which model gives the best prediction in a particular circumstance, but there is a right answer. Similarly, philosophical disputes are about how to think about the world when there are no reliable methods for answering our questions except careful attention to argument.

Why study philosophy? Most of you are not philosophy students and few of you intend to become professional philosophers. So why take my

classes? The answer, I think, is that learning and doing philosophy helps you acquire **skills** and **virtues** that are beneficial, both personally and professionally, to anyone. Philosophical skills like conceptual analysis, metacognition, and abstract reasoning are applicable in many careers and contexts. Philosophy majors as a group get higher scores on the GRE and LSAT than any other group of majors; philosophy education often improves performance in other subjects; and people who think philosophically often find it rewarding for the rest of their lives. (See www.whystudyphilosophy.com/ for more information.) So I'm going to push you to think like philosophers, even if we're not discussing traditionally "philosophical" topics.

Sometimes philosophy provides clear answers to big questions, but not often. So the point of a philosophy course is usually not to teach you a lot of facts. Rather, the point is to teach you how to think about abstract, confusing topics with clarity, precision, and critical awareness. You will often leave class more confused than when you entered; you will become uncertain about things you never thought to question. This may make you uncomfortable, but intellectual growing pains are good for you. Hopefully, at the end of the semester you will be more skilled at thinking through difficult, abstract questions—even if you don't know what to believe.

Ideas

Philosophical thinking requires careful attention to the way we judge and reason, and the easiest way to do that is to attend to the way we speak when we explain our judgments and reasoning. It is essential to distinguish **three kinds of ideas** we talk about when we explain our thinking. Each of these kinds of ideas have their own kinds of goodness and badness, which should also be distinguished carefully. So you should avoid using the word "idea" in this class if instead you can use the word "concept," "claim," or "argument."

Concepts Concepts are categories we use to divide the world up into bits that we can talk, think, and reason about. They're the kinds of things that are expressed in **words or phrases**, like TABLE, CAT, RUN, GOOD, BRAVE, FLYING BUTTRESS, or LINEAR REGRESSION (I write them in small capitals to distinguish them from words like "table," "gato," "逃げる," &c.). There are rules for using concepts correctly; if I call a table a "flying buttress," I'm probably using some concepts the wrong way. The activity of describing the rules for using concepts correctly is called *conceptual analysis*, and philosophers do a lot of it.

Each concept has an **extension**, the set of things it refers to. So the extension of TABLE is all the tables in the world. The extension of RUN is all the instances of running. The extension of UNICORN is empty, because there are no unicorns. So one way concepts can be good or bad is that they can succeed or fail at referring in particular cases (if I think about DR. AKAGI'S PET GOAT my concept fails to refer). Another way concepts can be good or bad is that they can be good or bad ways of categorizing things. For example, CRAZY might be a bad concept because you count people as "crazy" if they have a mental illness, and being crazy is shameful, but it's not shameful to have a mental illness. So the concept CRAZY gets you into trouble by encouraging you to think about people and illness in a bad way.

Claims Claims are the sorts of things that are expressed in **declarative sentences**, and are sometimes preceded by "that." *That it is raining* is a claim, and *there is no Santa Claus* is a claim. Claims describe states of affairs. The special kind of goodness or badness that belongs to claims is **truth** or **falsity**. A set of claims that are all believed by a single person is sometimes called a **view**. Note that concepts cannot be true or false. They can refer or not, and they can be good or bad categories for structuring your thoughts, but concepts don't describe the world the way claims do, so they can't be true or false. Likewise arguments can't be true or false. Individual conclusions and premises can be true or false, since they are claims, but arguments have different ways of being good or bad.

Arguments An argument is a reasoned defense of a claim. An argument consists of a claim, called a **conclusion**, and a reason that other people should believe the claim. These reasons often rely on assumptions, called **premises**, that fit together in a special way. Here is an argument:

- 1) Kevin is a mammal. *because...*
- Kevin is a goat.
 - All goats are mammals.

The first line is the conclusion. The other two lines are premises, that together provide a reason to believe the conclusion.

Note that not any kind of reason can be part of an argument. Suppose I believe the world is round. If you ask me why, I say it's because I was kidnapped and brainwashed by an evil scientist. That's no argument, because "I was brainwashed to believe it" doesn't provide the kind of reason that should motivate *other people* to believe the conclusion. Even if being brainwashed is the reason *I* believe the conclusion, it's not the basis for an argument. Or: according to my mother, I'm very handsome (conclusion) because I'm her son and she loves me (reason?). Either that's not an argument, either, or it's a very bad one, because it provides no reason for other people to believe I'm handsome (sorry, Mom).

There are three special kinds of goodness and badness that are important for judging arguments. The first is **validity**—an argument is valid just in case the conclusion must be true whenever the premises are true. Note that validity has nothing to do with whether the premises or the conclusion are actually true; it's just about whether the conclusion *would* be true *if the premises were true*. (N.B. A philosopher might also say that in a valid argument, the premises *imply* the conclusion. In this context, "to imply" doesn't mean "to suggest" or "to hint at"; it means the conclusion has to be true if the premises are.) Consider this argument:

- 2) Beyoncé is not a human. *because...*
- Beyoncé is immortal.
 - All humans are mortal.

The first premise of this argument is false, and so is the conclusion. But the argument is valid because *if the premises were true* then the conclusion would have to be true. Consider a third argument:

- 3) Abraham Lincoln is a human. *because...*
- All humans are mortal.
 - Abraham Lincoln is mortal.

Argument (3) is invalid, even though the premises and conclusion are all true. It's invalid because it's possible for the premises to be true and the conclusion false. You can see this if I explain that "Abraham Lincoln" is the name of my friend's cat. Validity is all about the relationship between the reason and the conclusion.

A second kind of goodness belonging to arguments is **soundness**. An argument is sound just in case (a) it is valid, and (b) the premises are all true. Argument (1) above is sound. The conclusion of a sound argument *must* be true, because the premises are true and if an argument is valid then the conclusion is true whenever the premises are true. Argument (2) above is valid but unsound, since it has a false premise. If an argument is unsound, its conclusions may be either true or false.

A third kind of goodness for arguments is **cogency**. An argument is cogent just in case the premises provide a pretty good but fallible reason for believing the conclusion. Consider another argument:

- 4) The sun will rise tomorrow morning. *because...*
- The sun has risen every morning in human history.
 - If something happens every day, it'll probably happen tomorrow, too.

Argument (4) is cogent; the premises are pretty good evidence that the conclusion is true. But the premise could be true and the conclusion false—e.g. if something catastrophic happens overnight. Argument (3) is not cogent; it is a lousy reason to believe the conclusion, even if the premises are true. You want to find sound arguments when you can, but sometimes cogent arguments are the best you can get and they're pretty good, too. A lot of scientific theory is based on cogent arguments rather than sound arguments. If we discover something very surprising, we may need to revise our theories.

Note that concepts and claims cannot be valid, sound, or cogent in this way. Validity, soundness, and cogency are relationships between reasons and conclusions, but concepts and claims do not have conclusions or reasons as parts. You might say casually that a claim is “valid,” but it is confusing to speak that way in philosophy unless you explain what you mean by “valid.”

kind of idea	...corresponds to...	distinctive kind of goodness
concept	a word or phrase	reference, good categorization
claim	a declarative sentence	truth
argument	a conclusion & a reason	validity, soundness, cogency

Some Common Valid Forms of Argument

Below I reproduce some common valid forms of argument. (If you want to understand more about logic and argumentation, you should take a course in logic—you will learn *a lot* more than I have included in this handout.) In the following, letters like *P*, *Q*, *R*, etc. stand in for claims.

Modus ponens

Q. *because...*

- If *P* then *Q*.
- *P*.

Transcendental argument (a version of modus ponens)

Q. *because...*

- *P* is possible only if *Q*.
- *P*.

Modus tollens

Not-*P*. *because...*

- If *P* then *Q*.
- Not-*Q*.

Reductio ad absurdum (a version of modus tollens)

Not-*P*. *because...*

- If *P* then *Q*.
- *Q* is ridiculous, impossible, or contradictory.

Disjunctive syllogism

Q. *because...*

- Either *P* or *Q*.
- Not-*P*.

Hypothetical syllogism

If *P* then *R* *because...*

- If *P* then *Q*.
- If *Q* then *R*.

Dilemma

R. *because...*

- *P* or *Q*.
- If *P* then *R*.
- If *Q* then *R*.

(In the dilemma form, *P* and *Q* are called the “horns” of the dilemma. If you have three horns, and the third horn also implies *R*, the form is called a “trilemma.”)

The Elenctic Trap

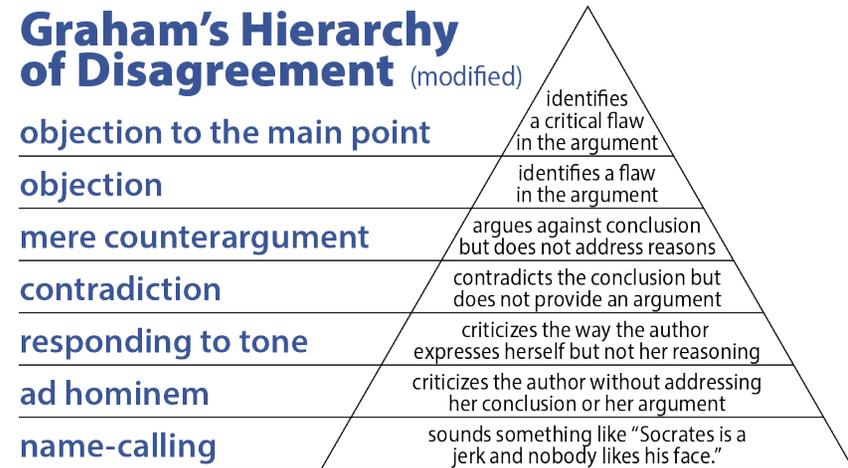
Attention to argument is the touchstone of philosophical thinking. When you have no other methods for evaluating claims, you examine the arguments for soundness, cogency, or validity and let that guide you. However, if we don't all agree on which premises are true, then it is difficult to tell which arguments are sound or cogent. So philosophical disagreements often proceed by laying and springing *traps*. You want to establish a conclusion I don't like, so you provide me with a valid or cogent argument for that conclusion with premises that I accept. Then I have to respond by either (a) denying a premise, or (b) accepting your conclusion whether I like it or not. I have to choose, or else I'm being irrational. Say you put this argument to me:

- 5) Mental states are not brain states. *because...*
- If mental states are brain states, then mental states are located in space.
 - Mental states are not located in space.

This is a valid argument (modus tollens). If I think that mental are brain states, I must figure out which of the premises I think is false (I must show the argument is unsound). If I think the premises are all true, I must concede that mental states are not brain states. This kind of trap is sometimes called **elenchus** (ἐλεγχος in Greek, for the nerds). You don't have to believe the conclusion of every argument you hear, but if the argument is valid you must either accept the conclusion or deny a premise.

Graham's Hierarchy of Disagreement

Some kinds of disagreement are more substantive than others. I refer my students to a hierarchy of disagreements outlined by Paul Graham (“How to Disagree,” <http://www.paulgraham.com/disagree.html>; diagram based on http://commons.wikimedia.org/wiki/File:Graham's_Hierarchy_of_Disagreement.svg):



Generally speaking, your contributions to class should rise to the level of “mere counterargument” or better. Objections that are suitable for papers must be at the level of “objection” or higher.

Common Argumentative Flaws

The arguments you read by philosophers will usually be valid or cogent, or at least they will not be invalid in any obvious way like Argument (3), above. But sometimes the reasoning will be flawed in subtle ways. Here are three common argumentative flaws that you might look out for when evaluating other people's arguments, and when crafting your own.

Equivocation Consider the following argument:

- 6) No woman is capable of speech. *because...*
- Only man is capable of speech.
 - No woman is a man.

This argument is bullshit—for *a lot* of reasons—but the reason that concerns me here is that “man” is used in two different senses. The first premise is only plausibly true if “man” is used to refer to humankind in general (don’t do that, by the way). The second line is only plausibly true if “man” is used to refer to people of the masculine gender (or something). The argument appears valid because “man” in the first sense is spelled and pronounced the same way as “man” in the second sense, but they’re different concepts. They have different extensions (i.e. they refer to different sets of things in the world). You can see that the argument is invalid if you replace “man is” in the first line with “humans are”; the conclusion doesn’t follow from the premises at all. When you use a word in two different senses like this across claims in an argument, it’s called **equivocation**.

Straw man Suppose I say that haggis is delicious, and you want argue that I’m wrong. You might be tempted—well, you wouldn’t do this, but someone else might—to argue against some claim that is superficially similar to my claim, but less plausible or just different. This is called knocking down a **straw man**. For example, you might say: “Dr. Akagi thinks haggis is, like, the best thing ever. But what about justice, man? Haggis isn’t better than justice.” But I never said that haggis is better than justice; I said only that it is delicious. Or you might say: “It’s wrong to eat meat because the meat industry abuses animals.” That’s a fine point, and I am sympathetic, but it does not imply that haggis is not delicious. It might imply that we shouldn’t eat meat or support factory farms, but that could all be right and it could still be true that haggis is delicious.

Begging the question In philosophy, “begs the question” has a specialized meaning; it does not mean “makes this other question seem

urgent.” An argument is said to be question-begging if it assumes its own conclusion (this is also called “circular reasoning”). A question-begging argument will generally be valid or cogent, since the conclusion will be true whenever the premises are true. However, a question-begging argument is inappropriate for convincing someone else of the conclusion; i.e. it is not an effective elenctic trap. Suppose you ask me why I think goats are great. If I tell you “They’re goats, and they’re just really great!”... well, the argument is valid because if the premise is true (goats are really great) then the conclusion must also be true (goats are great). But I haven’t really given you a reason to believe what I believe.

As a psychological side note, it’s easy to spot question-begging arguments when you disagree with the conclusion. But it’s harder for humans to spot the problems with a question-begging argument when we agree with the conclusion, so be on the lookout! And when you write your papers, try to put yourself in the mindset of someone who disagrees with your conclusion; think about what else they’ll disagree about. Also, try not to simply rephrase the conclusion instead of giving independent reasons.

Stages of Philosophical Maturity

In this final section, I’m going to brainwash you a little with my own thoughts on what good philosophical thinking looks like. I’m going to tell a brief story about how some people develop in their philosophical thinking—an abstract mini-*philosophischen Bildungsroman* in three acts.

Immunity to argument One surefire way to avoid philosophical thinking is to fail to care that you have inconsistent beliefs or attitudes. Say you believe that lying is always wrong, and you also believe that it is permissible and necessary to lie sometimes—say, when a murderer appears at your door looking for your friend, whom you are hiding inside your home, and asks “Where is your friend? I am here to murder them.” You can’t believe both things. If lying is always wrong, it is wrong to lie to the murderer at your door. If it is permissible to lie to the murderer, then

lying isn't always wrong. This is an elenctic trap. You have to change one of your beliefs.

It's okay to have inconsistent beliefs—we all do—but when they are brought to your attention you should try to resolve them. It's also okay to be unsure how to resolve them; the world is complicated and sometimes it's difficult to sort out what to believe. But if you don't care at all, if you feel no pressure to try to resolve inconsistent beliefs when they are brought to your attention, then it will be difficult to care about philosophical questions. Thus, the first step toward philosophical thinking is simply recognizing the elenctic trap (if you understood that section above then congratulations! You're well on your way).

Bullshit-detecting Once you recognize the elenctic trap, you might try to develop reliable strategies for overpowering it. One strategy is to ignore every argument that isn't sound. No valid argument can trap you as long as you reject at least one premise. An unsound argument makes no demands on you to change your mind. And so you might go through life hearing arguments and listening carefully for the first sign of a false assumption. Then, when you find an assumption you don't care for, you disregard everything that follows. Problem solved. Philosophers acquire a very sensitive capacity for detecting false or controversial assumptions, so this strategy becomes very alluring for the budding philosopher.

I call this stance “bullshit-detecting.” Unfortunately, this strategy can also insulate you from a lot of insight that other people have to offer. Sometimes the false premise doesn't contribute much to an argument, and the argument can be fairly compelling even if the problematic premise is discarded. Sometimes you can rephrase the argument with a slightly different premise, and the rephrased argument can trap you. A more mature philosopher will try to find the value in an argument even when it is unsound.

Tolerance for ambiguity After overcoming the temptation to disregard every unsound argument, you may find yourself in uncertainty about many things. You hear some compelling but imperfect arguments for p , and some compelling but imperfect arguments for not- p , and you don't know whether to believe that p . Or you hear a compelling argument for p , but it depends on a controversial claim q , and you also don't know whether to believe that q . You will acquire an irritating habit that whenever someone asks you a question with philosophical complications you will begin your answer by saying “Well, it depends on what you mean by...” Do not be alarmed. This may annoy your friends but it is normal and cognitively healthy.

It may be uncomfortable at first to be uncertain about so many things—to know that your beliefs are up in the air, but all tethered together, and any argument you consider could require you to rearrange many of your beliefs. But the world is complicated and it is good to face those complications honestly and bravely, with acceptance and respect. And as you continue to practice thinking philosophically, you will find that the uncertainty becomes easier to bear, that your ability to juggle claims and arguments improves, and that—far from being beholden to argumentative caprice—you possess a discerning power over language and reason.

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