TWO TIPS FOR TAKING PHILOSOPHY COURSES

MATT LEONARD (USC)

If you are taking a philosophy class for the first or second time, I recommend (carefully and slowly) reading what follows. If you can get a handle on the two tips discussed in this short handout, then you will do significantly better in the course than if you don't get a handle on these tips.

It is very easy to go an entire semester listening to a philosophy professor lecture about certain theories, arguments, and objections while finding yourself barely being able to keep up. Here is my guarantee: if you master the two tips discussed in this handout, two things will happen. First, you'll be able to track your professor. It'll be a lot easier to follow the maneuvers she takes in the lecture and/or discussion. Second, you will know exactly how to engage in philosophy yourself. Here are the two tips:

1. Know how to detect GOOD ARGUMENTS.
2. Know how to give a CONCEPTUAL ANALYSIS.

There are all sorts of ways of doing philosophy well. But many, many philosophers all over the world employ two central methodological strategies: they give philosophical *arguments* and they give philosophical *analyses*. Again, if you can get the hang of *arguments* and *analyses*, you will do much better in your philosophy course. Let's discuss these in order.

1 GOOD ARGUMENTS

You must know how to detect a good argument. But before I tell you how to detect a good argument, let me first tell you what an argument is. When philosophers use the word 'argument', they have a very particular thing in mind. An argument is a collection of *premises*, followed by a *conclusion*. The premises are sentences which aim to, when taken together, *entail* the conclusion. The majority of us will quickly see that there are *good* arguments and there are *bad* arguments. Here is a good argument:

1. If Sarah received an A for every assignment, Sarah received an A for the course.
2. Sarah received an A for every assignment.
3. Therefore, Sarah received an A for the course.

If premise (1.) and (2.) are true, there is no way for the conclusion to be false. Here is a terrible argument:

1. If God exists, then prayer makes the world a better place.
2. Prayer makes the world a better place.
3. Therefore, God exists.

You can imagine an atheist thinking that both (1.) and (2.) are true: the former simply says *if* God exists, then prayer makes a difference in the world; and (2.) very well could be true for sociological reasons. But even if we assume (1.) and (2.) are true, it is still possible that (3.) be false. This is a terrible argument for the existence of God.

What differentiates good arguments from bad arguments? Two things. The good arguments have the following two characteristics:

1. Validity: an argument (composed of some number n premises $p_1, p_2, ..., p_n$ and a conclusion c) is valid just in case the following obtains: if premises $p_1, ..., p_n$ are true, it *must* be the case that the conclusion c is true as well.
2. Soundness: an argument (composed of some number n premises $p_1, p_2, ..., p_n$ and a conclusion c) is sound just in case two things obtain: (1) the argument is valid, and (2) each of the premises is actually true.

Think about this argument for a moment:

1. Every US president (past and present) is male.
2. Barack Obama is a US president.
3. Therefore, Barack Obama is male.

Suppose you have never heard of Barack Obama. Assume (1.) and (2.) are true. Is it logically possible for Obama to not be male? Nope. There's no way. *If* (1.) and (2.) are true, (3.) *must* be true. So this argument is valid. Is it sound? (1.) is true (unfortunately) and (2.) is true. So yes: the argument is sound. Since it's valid and sound, this is a good argument.

How about this one:

1. Most US Presidents are (or have been) left-handed.
2. Obama is a US president.
3. Therefore, Obama is left-handed.

This is a terrible argument. (2.) is actually true. But ask yourself: if (1.) and (2.) were both true, would it be the case that (3.) *must* be true? Of course not. So this is a terrible argument.

Every time your professor or classmate offers an argument, ask yourself the following: is it at least *logically possible* for all of the premises to be true while the conclusion be false? If so, the argument is bad and you aren't forced to accept the conclusion.

Also, every time you are asked to give an argument for a thesis or a position, you need to give an argument like the ones I've been talking about. It needs to be valid and you need to argue that it is sound. Suppose you want to defend the claim that "morality is objective." Sometimes it's difficult to write up from scratch a *valid* argument for this conclusion. Perhaps the most reliable way to check an argument for validity is to use the Truth-Table Method — see my handout "Basic Logic and Truth Tables" here:

http://matt-leonard.org/teaching.html . But this might be unnecessarily complicated for your purposes in your first or second undergrad level philosophy course. Another way to guarantee that your argument is valid is to simply build up your argument using validity-guaranteeing argument patterns. Below, I provide a few such argument patterns. Take out a piece of scratch paper and write down your conclusion (for example, "morality is objective") at the bottom of your paper. Then, use one of the patterns below to crank out a valid argument. Here are the patterns:

1.1 Patterns of Valid Arguments

Modus Ponens

1. If P, then Q.
2. P.
3. Thus, Q.

Modus Tollens

1. If P, then Q.
2. It's not the case that Q.
3. Thus, it's not the case that P.

Disjunctive Syllogism

1. P or Q.
2. It's not the case that P.
3. Thus, Q.

Hypothetical Syllogism

1. If P then Q.
2. If Q, then R.
3. Thus, if P, then R.

Universal Syllogism

1. All As are Bs.
2. All Bs are Cs.
3. Thus, As are Cs.

Universal Instantiation

1. All As are F.
2. a is an A.
3. Thus, a is F.

Our good argument above about Barack Obama being male was an instance of Universal Instantiation. Our good argument above about Sarah receiving an A for the course was just an instance of Modus Ponens.

Part of what makes philosophy difficult is trying to construct a valid argument, with your thesis appearing on the last line of the argument. One trick to keep in mind in making your arguments more convincing is to use multiple logical patterns to construct a complex argument. Here is an example of such an argument:

1. Either morality is objective, or killing innocent people for fun is permissible.
2. Killing innocent people for fun is not permissible.
3. Thus, morality is objective.
4. If morality is objective, then there must be a divine moral lawgiver.
5. Thus, there must be a divine moral lawgiver.

You should have noticed that two lines, (3.) and (5.) begin with the word 'thus': these are conclusions. (3.) is a *sub-conclusion* which we use to get to our final conclusion, i.e., (5.). Notice that (1.)-(3.) is an instance of Disjunctive

Syllogism and (3.)-(5.) is an instance of Modus Ponens. It's totally fine that we used (3.) two different times.

Since I've used nothing but valid logical patterns to derive my conclusion, i.e., "there must be a divine moral lawgiver," my opponent can't insist that my conclusion doesn't follow from my premises. What she now must do is deny soundness: she must maintain that not all of the premises are true. So, in effect, what I've done is to force my opponent to reject (1.), (2.), or (4.): notice that she cannot deny (3.) or (5.), since those are conclusions. This is the first tip for doing philosophy well: know how to detect good arguments by checking for validity and soundness.

2 CONCEPTUAL ANALYSIS

Now for the second tip. Above we spent some time talking about how to recognize good *arguments*. But sometimes, your professor will simply ask you a question. Here are some famous questions in philosophy:

1. What is knowledge?
2. What things are permissible to kill what things aren't?
3. What makes it the case that you are identical to the person in your baby pictures?
4. What is freedom?

When your professor asks you these sorts of questions, she is not asking you for an argument; she's not asking you to come up with a list of premises and a conclusion. She's asking for an answer. These answers are tricky sorts of things. They are what philosophers call *analyses*.

We will slowly build up to what an analysis is. The first thing you need to understand is the distinction between a necessary and a sufficient condition for something. Let's narrow in on one particular concept: *being a mammal*. A necessary condition of *being a mammal* is a condition which all mammals must satisfy. Here are some obvious necessary conditions for *being a mammal*:

- being an animal
- having a brain

It is impossible for a mammal to *not* be an animal or *not* to have a brain. So these are necessary conditions of being a mammal. A bit more abstractly, let's say that a condition x is a *necessary condition* of concept c just in case it is impossible for something to be c without being x. It's impossible to be a mammal without being an animal.

On the other hand, a sufficient condition for being a mammal is a condition where if you satisfy that condition then you are *automatically* a mammal. Here are some obvious sufficient conditions for being a mammal:

- being a human
- being a tiger

If you are a human, then you are automatically a mammal. So *being human* is a sufficient condition for *being a mammal.* So again, a bit more abstractly, let's say that a condition x is a *sufficient condition* for a concept c just in case, if something is x, then it is automatically c. If something is a tiger, then it is automatically a mammal.

Take 30 seconds and quiz yourself. Which of the following are necessary conditions for *being a brother*?

1. being male
2. having a sibling
3. having a brother

(1.) and (2.) are necessary conditions for *being a brother*, but (3.) isn't. You can be a brother and not have a brother; you could have a sister. Now, which of the following are sufficient conditions for *being an American citizen*?

1. being born in the US
2. being a human being living in Los Angeles
3. passing the US citizenship test

(1.) and (3.) are sufficient conditions for *being an American citizen*: if you're born in the US or if you pass the US citizenship text, you automatically are an American citizen. But (2.) is not a sufficient condition; you could be a human being who happens to be vacationing in Los Angeles. But that doesn't automatically make you an American citizen.

Now let me tell you how to use necessary and sufficient conditions to give adequate answers to the sorts of questions philosophers ask. When philosophers ask you a question like one of the questions I mentioned above, they expect an answer with the following words somewhere in the middle of your answer: *if and only if*. Let's start abstractly and then we'll look at one easy example. Suppose your philosophy professor asks you the following: *what is an F?* Your answer should have the following form:

x is an F if and only if
1. x is blah
2. x is blah
3. x is blah

⋮

(1.), (2.), (3.), and so on are conditions. Here is the trick. Each condition needs to individually be a necessary condition for *being F*. And taken together, (1.), (2.), (3.), and whatever else you write down on the right-side of the 'if and only if' phrase, need to be *jointly sufficient* for *being F*. In other words, if something is (1.), (2.), and (3.), it needs to automatically be F.

Let's take an easy example. You're sitting in philosophy class one day and your professor gazes into the heavens and asks you: what is a square? Given what I've said, your answer needs to be of the following form:

x is a *square* if and only if
1. x is blah

⋮

How should we answer this question? Think about the following first attempt.

Attempt 1

x is a *square* if and only if	1. x has four sides

(1.) is clearly a necessary condition for being a square. But unfortunately, it's not sufficient for being a square. Having four sides doesn't automatically make something a square. Consider a rectangle. This has four sides but it is not a square. Time for one last piece of jargon. A rectangle is a *counterexample* to Attempt 1. Let's say that a *counterexample* to an analysis is an example which satisfies one side of the 'if and only if', but not the other. A rectangle satisfies the right side of the 'if and only if' in Attempt 1, but not the left side.

How can we possibly fix this answer to our professors' vexing question about squarehood? Maybe like this:

Attempt 2

x is a *square* if and only if	1. x has four sides 2. x has sides of equal length

Now, a rectangle isn't a counterexample to Attempt 2, because being a rectangle doesn't satisfy either the left or the right side of the new 'if and only if'. But there is still a blatant counterexample to Attempt 2: for instance, a rhombus. This suggests that we need to revise our answer in the following way:

Attempt 3

x is a *square* if and only if	1. x has four sides 2. x has sides of equal length 3. x has only 90° angles

Can you think of a counterexample to Attempt 3? No. You cannot. This, then, is our answer to the professor's question.

This was actually quite easy. Philosophy is notorious for asking really difficult questions. But when asked a really difficult question, sketch an answer with a form like the above 3 attempts for being a square, and try to come up with counterexamples. When you come up with a counterexample, revise your account: add a new necessary condition to your long list on the right and see if you have an adequate answer to whatever question you're thinking about. These answers are what philosophers call *conceptual analyses*.

3 CONCLUSION

Learn how to do these two things and you'll do philosophy well:

1. Know how to detect GOOD ARGUMENTS.
2. Know how to give a CONCEPTUAL ANALYSIS.