

Guide to Argument Reconstruction

Arguments: what we have already seen

This is just a brief introduction to arguments—more like a crib sheet of central basic concepts in logic and argumentation. If you would like to study arguments in more detail, I recommend taking Philosophy 101: Logic, Reasoning, and Persuasion; Philosophy 109: Introduction to Formal Reasoning and Decision-Making; or Philosophy 201: Introduction to Logic. In the meantime, you can also check out this brief Khan Academy course.

When philosophers talk of arguments, they do not mean a conflict or discussion. Instead, an argument is a set of reasons offered in favor of a claim. The reasons are called *premises*, and the final claim is called the *conclusion*. We will be focusing here on *deductive* arguments: arguments that are supposed to fully establish the conclusion once you grant the premises (in contrast with inductive arguments, where the premises only make the conclusion more likely but do not guarantee it).

For example, consider the following annotated argument:

- | | |
|--|-----------------|
| (1) The Bible has predicted many historical events that have come to pass. | [premise] |
| (2) Therefore, whatever the Bible says is true. | [from (1)] |
| (3) The Bible says that God exists. | [premise] |
| (4) Therefore, God exists. | [from (2), (3)] |

(1) and (3) are **premises**, statements asserted without a proof (but which we hope are plausible!).

(2) is an **intermediary conclusion**, a conclusion that follows from an earlier premise, and which, taken together with other premises, supports the argument's conclusion—in this case, (4).

An argument is **valid** *if and only if* it is *absolutely impossible* for its premises to be true and its conclusion false. Notice that the argument above is **invalid**.

- | | |
|--|-----------------|
| (1) The Bible has predicted many historical events that have come to pass. | [premise] |
| (2) Therefore, whatever the Bible says is true. | [from (1)] |
| (3) The Bible says that God exists. | [premise] |
| (4) Therefore, God exists. | [from (2), (3)] |

Premise (2) does not follow *logically* from premise (1). We can imagine logically possible scenarios where (1) is true and (2) is false: for example, perhaps the Bible has correctly predicted many historical events that have come to pass, but also made many predictions that did not come to pass.

Note that, by contrast, the argument that consists of (2)–(4) *is* valid. If (2) and (3) are true, it is logically *impossible* for (4) to be false. We can't imagine a situation where (2) and (3) are true and (4) is false.

Of course, just because an argument is valid doesn't mean it's a good one. An argument can be valid and rely on clearly false premises.

- (1) All philosophers are criminals.
- (2) All criminals are short.
- (3) Therefore, all philosophers are short.

Moreover, an argument can be valid and have clearly true premises but be completely uninformative.

- (1) All squares have four sides.

(2) So, all squares have four sides.

When writing a deductive argument, the ideal to aim at is *soundness*. A deductive argument is sound just in case:

1. All the premises are true
2. The argument is valid: If all the premises are true, the conclusion is true (to put it another way: there is no way for the premises to be true while the conclusion is false)

Your goal when writing a paper will be to develop sound arguments. In philosophy (and in life), there aren't that many claims that everyone accepts to be true: for this reason, your goal is to argue from plausible premises, even if they are not known to be true.

Your goal in argument reconstruction will be to reconstruct arguments so that they are valid, that is, so that, if the premises are true, the conclusion also has to be true. The idea behind reconstructing arguments so that they are valid is that this focuses attention on the author's assumptions. Once you have a valid argument with a conclusion you reject, you also have to reject one of the premises. This makes it easier to figure out points of disagreement.

Argument reconstruction

The basic steps to reconstructing an argument are the following:

1. Read and re-read the passage.
2. Identify the conclusion.
3. Identify the premises.
4. Identify evidence/reasons given for the premises.
5. Add implicit premises or assumptions, if any.
6. Sketch out your reconstruction.

A crucial point to note about argument reconstruction is that **you should start from the bottom—the conclusion— and work your way up from there**. First, you identify the conclusion, then the main reasons for the conclusion, then the reasons given for those reasons, and so on. Trying to go the other way around is a sure way to get confused.

Let's go over these steps in more detail, considering the following short argument:

Do you think your local butcher will reduce the amount of meat she orders from the slaughterhouse if you become a vegetarian? Of course not! The supply chain for meat just isn't sensitive to the quantities that a single person consumes. So by becoming a vegetarian, you'll never save a single animal's life! But by becoming a vegetarian you'll deprive yourself of the pleasure of eating meat (my favorite kind of food), and you should only do that if the benefits would outweigh the losses. So you should only become a vegetarian if doing so would save some animals' lives.

1. Read and re-read the passage

At this stage, your goal is to understand what is being said. In a longer text, it is at this stage that you identify the passage where the central argument is given. Once you have identified that passage (or if it was given to you), read it a few times, and make sure that you understand all the terms that are used.

When do you know that you have understood the argument? When you are able to reformulate it in your own words in a way that makes clear roughly what the author is arguing for and what their reasons are. This brings us to...

2. Identifying the conclusion

The conclusion is what the author is arguing for. Their goal is to persuade you of the conclusion.

Commonly, in philosophy papers, authors write something like “In this paper, I will argue that...” or “My central claim is...” or “The thesis of this paper is...”. This helps you identify the conclusion: it is whatever replaces the “...” in the sentences above.

In other cases, it may be less clear what the conclusion is. To find out, you can ask yourself:

- What is the person trying to get you to believe?
- Use the ‘because’ test: read one statement after the other but insert the word ‘because’ between the two statements. See what makes more sense. The conclusion comes before ‘because’, never after.
 - o For example, “*Evermore* was a disappointment because the songs were generic.” Sounds much better than “The songs in *Evermore* were generic because it was a disappointment.”, indicating that “*Evermore* was a disappointment” is the conclusion, and “The songs in *Evermore* were generic” the reason for that claim.
 - o This is also a good test for identifying premises that arrive late in the argument vs. reasons given for those premises.
- Notice words that signal a conclusion: so, therefore, in conclusion, for this reason, it follows that...

Sometimes, the conclusion isn’t explicitly stated but only implied. For example, the argument above is an argument against vegetarianism; in other words, it is an argument for the claim “You should not become vegetarian.”. The best way to see this is by focusing on what the author is trying to get you to believe.

3. Identifying the premises

At this stage, you want to ask yourself: what does the author need to do to establish the conclusion? How would you explain the author’s line of reasoning?

For example, to establish that people should not become vegetarian, one would need to show that there are better reasons for eating meat than for refraining from it; in other words, that the goodness of eating meat outweighs the badness. Indeed, this is what the author of the argument we are considering attempts to do.

Here is the argument again:

Do you think your local butcher will reduce the amount of meat she orders from the slaughterhouse if you become a vegetarian? Of course not! The supply chain for meat just isn’t sensitive to the quantities that a single person consumes. So by becoming a vegetarian, you’ll never save a single animal’s life! But by becoming a vegetarian you’ll deprive yourself of the pleasure of eating meat (my favorite kind of food), and you should only do that if the benefits would outweigh the losses. So you should only become a vegetarian if doing so would save some animals’ lives.

Indeed, the author follows the strategy of arguing that losses outweigh benefits. To put it differently, the central premises—the ones that lead to the conclusion—therefore are:

- (a) If the benefits of becoming vegetarian do not outweigh the losses, you should not become vegetarian.
- (b) The benefits of becoming vegetarian do not outweigh the losses.

4. Identifying evidence/reasons given for the premises

At this stage, you have only identified the final bits of the argument: the reasons that ultimately support the conclusion. But (unless this is a really short argument) these reasons came from somewhere: the author gives reasons to support them. Your task is to identify those reasons.

For example, you might think that (a) above is pretty self-evident; indeed, there is nothing in the paragraph above to justify it. But what about (b)? (b) is quite substantive. To establish it, one would need to consider what the benefits and losses of becoming vegetarian are, and count them up against each other. Here is what we can extract from the argument:

- Losses: losing the pleasure of eating meat
- Gains: none mentioned! The author considers a potential gain—saving animal lives—and argues that “you’ll never save a single animal’s life”
 - o Next step: Why not?
 - The supply chain for meat just isn’t sensitive to the quantities that a single person consumes.

At this stage, you could already write the following:

1. An individual becoming vegetarian does not affect the supply chain.
2. So becoming vegetarian does not save a single animal’s life.
3. So there are no benefits to becoming vegetarian.
4. Becoming vegetarian incurs the loss of pleasure from eating meat.
5. If the benefits of becoming vegetarian do not outweigh the losses, you should not become vegetarian.
6. The benefits of becoming vegetarian do not outweigh the losses.
7. You should not become vegetarian.

5. Adding implicit premises/assumptions

Often, authors don’t make fully explicit what they are assuming. In reconstructing their argument, you want to add in the important unspoken assumptions.

For example, the author of the argument we are considering does not make explicit that, in their view, there are no additional benefits to becoming vegetarian. Why is it fair for us to claim that the author assuming that? Well, if they are not, then the argument would not establish the conclusion: there could be some other benefit to vegetarianism that outweighs the loss of the pleasure of eating meat. Another way of seeing this is by noticing that there is a gap between premises 2 and 3 and thinking about what the author must be assuming to license that transition.

Similarly, there is a gap between the claim that an individual becoming vegetarian does not affect the supply chain, and the consequence derived from it—that becoming vegetarian does not save a single

animal's life. To plug this gap, the assumption lurking in the background must be that the only way in which becoming vegetarian would save an animal's life is by affecting the supply chain.

Adding implicit premises is tricky, and it takes a while to get the handle on this. As a beginner, you should focus on getting to the previous stage and then looking at what you would need to add explicitly to plug in gaps in a way that makes the argument flow.

6. Sketch out a reconstruction of the argument as a list of numbered premises leading to the conclusion.

You are pretty much done: at this point, you are just putting together all that you have done before, and smoothing it out to ensure good flow. Specifically, you want to make sure that you use the same language in different premises, and you want to make clear where the premises are coming from. One way of doing this is by writing in brackets in front of the sentence the numbers for the premises it is derived from. This helps the reader track the structure of the argument.

1. The only way in which becoming vegetarian would save an animal's life is by affecting the supply chain.
2. An individual becoming vegetarian does not affect the supply chain.
3. Becoming vegetarian does not save a single animal's life. (from 1, 2)
4. The only potential benefit of becoming vegetarian would be saving animal lives.
5. There are no benefits to becoming vegetarian. (from 3, 4)
6. Becoming vegetarian incurs the loss of pleasure from eating meat.
7. If the benefits of becoming vegetarian do not outweigh the losses, you should not become vegetarian.
8. The benefits of becoming vegetarian do not outweigh the losses. (from 5, 6)
9. You should not become vegetarian. (Conclusion, from 5, 6)

Some words of encouragement

Argument reconstruction is somewhat counterintuitive at the beginning, and it takes looking at a passage much more carefully than you might be used to. It also requires you to focus on the argument, pruning away rhetorical flourishes or literary devices (unlike what we do in other contexts, where we attend to those). But it is a skill you are already on your way to developing, as a person who understands arguments and can respond to them in conversation. With time, argument reconstruction will come to feel straightforward, perhaps almost automatic.

Finally, argument reconstruction is a useful and illuminating skill. Once you have laid out a piece in argument form, it is entirely clear what the author is relying on to establish their conclusion (explicitly or implicitly). This makes it easy to see where you think they go wrong—or where you would need more convincing.