

Argument Structure  
III) Lesson 2: Inference Indicators  
(with Subconclusions)

Slide 1

Welcome to Lesson 2.

At the end of this lesson, you will be able to state the definition of “subconclusion” and use conclusion and reason indicator expressions to communicate and analyze arguments with subconclusions.

Slide 2

Let’s begin by returning to an argument from the previous lesson, the argument that takes “Dogs are intelligent” as a reason to believe “Dogs make good pets.” In this argument, “Dogs are intelligent” is taken as a premise because the argument doesn’t give us reason to believe that this is true. The argument simply takes the intelligence of dogs for granted. But, of course, it doesn’t have to be this way and we could provide reasons to believe that dogs are intelligent.

We could, for example, observe that dogs can learn tricks and take *that* as a premise to support the claim that dogs are intelligent. When we do this, of course, we are no longer taking the claim that dogs are intelligent for granted and so it is no longer a premise.

It is, instead, a subconclusion, or an intermediate idea on the way from the premises to the ultimate conclusion. The argument gives us reason to believe it, and uses it as a reason to believe something else.

Slide 3

We can use conclusion indicator expressions to write arguments containing subconclusions. This often involves starting at the top of the diagram and writing our way to the bottom, like this:

“Dogs can learn tricks

so

they’re intelligent.

Thus,

they make good pets.”

And we can use reason indicator expressions to write arguments containing subconclusions. This often involves starting at the bottom of the diagram and writing our way to the top, like this:

“Dogs make good pets

since

they’re intelligent.

After all,

they can learn tricks.”

Finally, because arguments containing subconclusions have more than one inference, we can write such arguments using *both* conclusion *and* reason indicator expressions. This can sometimes be a bit tricky because instead of starting at the top of the diagram and writing to the bottom, or starting at the bottom of the diagram and writing to the top, using one conclusion indicator and one reason indicator will require us to “zig zag” a bit. In this passage, for example, we started with the subconclusion, then said the premise, and ended with the conclusion, like this:

“Dogs are intelligent

because

they can learn tricks.

It follows that

they make good pets.”

When an argument is written this way, we need to think very carefully about the inference indicator expression that’s attached to the ultimate conclusion, in this case, the conclusion indicator expression “it follows that.”

A relatively unreflective reading of this conclusion indicator expression would have us think that “dogs make good pets” follows directly from the claim that dogs can learn tricks. But of course this is mistaken.

Instead, the conclusion “dogs make good pets” follows from the entire preceding chain of reasoning. This something that we need to watch for. A conclusion indicator expression that’s attached to the ultimate conclusion *might* tell us that the preceding idea goes directly to the ultimate conclusion or it *might* tell us that the preceding line of reasoning brings us to the ultimate conclusion. Because a conclusion indicator

expression attached to an ultimate conclusion can be ambiguous in this way, it's a good idea to focus on the other inference indicator expressions in an argument first.

The same remarks hold for a reason indicator expression that's attached to an ultimate conclusion. For example, in this passage

the reason indicator expression "this is because" is attached to the ultimate conclusion.

An unreflective reading of this reason indicator expression would have us think that the conclusion follows directly from the claim that dogs can learn tricks. But once again, this is mistaken.

Instead, the conclusion "dogs make good pets" follows from the entire preceding chain of reasoning.

Now that we've seen how to write a passage that contains an argument when we're given the argument diagram, let's turn to constructing the diagram for an argument that appears in a passage.

#### Slide 4

We'll consider the passage "Cats are easy to care for because they're independent. Consequently, they make good pets."

The first thing we should note is ultimate conclusion of the argument, "cats make good pets." It's always a good idea start by noting the ultimate conclusion, if we can.

"Consequently" is a conclusion indicator expression that attaches directly to the ultimate conclusion so we need to think about how it works.

Does it tell us that the conclusion follows directly from the preceding idea

or does it tell us that the conclusion follows from the preceding chain of reasoning?

Well, the "because" in that little chain of reasoning indicates that "cats are independent" is being given as reason to believe "cats are easy to care for."

This means that "cats are independent" doesn't go directly to "cats make good pets" and so the "consequently" in front of "cats make good pets" must be telling us that the conclusion follows from the entire preceding chain of reasoning.

Having figured that out, we can finish diagramming the argument.

And when we do, we see that “cats are independent” is being given as a reason to believe “cats are easy to care for,” and that “cats are easy to care for” is being given as a reason to believe “cats make good pets.”

Just for the sake of reviewing our terminology, we might note that “cats are independent” is a premise in this argument, that “cats are easy to care for” is a subconclusion, and that “cats make good pets” is the ultimate conclusion.

This concludes Lesson 2. You may now proceed to the “Gauge Your Understanding” exercises and then continue with Lesson 3a.