5.6 & 1.6 – Constructing Arguments

Most of the arguments we have looked at so far are pretty straightforward, providing you with exactly the information needed in order to prove the conclusion—no less, no more. But, arguments in the real world are not usually that clear. They often *leave out something crucial*, or else *include something totally irrelevant*. The purpose of this lesson is to figure out how to handle those sorts of arguments.

Enthymemes

An enthymeme is an argument that leaves out one of the required premises or the conclusion. This happens all the time in conversation. For instance,

"You're going to need a jacket, because it's cold."

If we were to write this formally, we would only get:

- 1. It is cold.
- 2. Therefore, you're going to need a jacket.

But, this argument is invalid as it stands. The conclusion does NOT follow from the premises. What is needed is another premise explaining the connection between the fact that it is cold and your needing to bring a jacket. In conversation, this connection is IMPLIED (Duh! I know that when it's cold, I need to bring a jacket!). But, an argument needs to include all of the implied unspoken bits if it is going to be valid. So, the argument should say:

- 1. It is cold.
- 2. If it is cold, then you're going to need a jacket.
- 3. Therefore, you're going to need a jacket.

Sometimes, the thing that is missing will be the conclusion. For instance:

"People who hurt others are not good people, and Jack hurts others all the time."

Covert into:

- 1. All people who hurt others are not good people.
- 2. Jack is a person who hurts others.

The conclusion that is implied here is that Jack is not a very good person, but this conclusion is not SAID explicitly, out loud. In order to make this a valid argument, however, we'll need to write down the conclusion:

- 1. All people who hurt others are not good people.
- 2. Jack is a person who hurts others.
- 3. Therefore, Jack is not a good person.

Note: Do homework for section 5.6 at this time.

Extended Arguments

Vertical and Horizontal Implications: Arguments come in many varieties. Sometimes, an argument has a linear progression where each statement supports the next one (the textbook calls these "**vertical**" arguments). Other times, an argument supports some conclusion by citing a bunch of different reasons that do not support each other, but all help to strengthen the conclusion (the textbook calls these "**horizontal**" arguments.

Vertical Arguments: Here is a "vertical" argument:

"Alex likes ice cream, because ice cream is sweet, and sweet things are good, and Alex likes everything that's good."

Here, we have a chain from one premise to the next, where **each premise supports the next one**. We can write this down more formally as the following valid argument:

- 1. All ice cream is sweet.
- 2. All sweet things are good things.
- 3. All good things are liked by Alex.
- 4. Therefore, all ice cream is liked by Alex.

Horizontal Arguments: Here is a "horizontal" argument:

"Steven is a great guy. I mean, he's funny, considerate, and really interesting."

Here, several different reasons all directly support the conclusion. In argument form:

- 1. Steven is funny.
- 2. Steven is considerate.
- 3. Steven is very interesting.
- 4. Therefore, Steven is a great guy.

[Note that, as it stands, this is actually an enthymeme, because we'd have to supply one more premise in order to make it valid—something like "If someone is funny or considerate or interesting, then they are a great person."]

<u>Conjoint Premises:</u> Notice that, in the argument about Steven, any ONE of the premises would support the conclusion all by itself. But, often, single premises do not support the conclusion alone—rather, they need to be joined with another premise in order to do that.

"Some people think cilantro tastes like soap, because cilantro has a weird molecule in it that tastes like soap when detected, and some people's taste buds can detect it."

We might write this argument as follows:

- 1. Cilantro has a weird molecule in it that tastes like soap when detected.
- 2. Some people's taste buds can detect this weird molecule.
- 3. Therefore, some people think cilantro tastes like soap.

Notice that neither premise ALONE supports the conclusion. But, **both premises together JOINTLY support the conclusion**.

<u>Multiple Conclusions:</u> Sometimes, several conclusions are supported at the same time by the premises. For instance, here:

"If we don't bring sleeping bags and a tent, we will probably die. So, we need to go buy a tent, and we also need to buy sleeping bags."

Here is the argument:

- 1. If don't bring sleeping bags and a tent, we will probably die.
- 2. Therefore, we need to go buy a tent.
- 3. Therefore, we also need to go buy sleeping bags.

Here, (2) AND (3) are conclusions, and (1) is the sole premise. [Note that this is actually another enthymeme. In order to make this valid, we would have to add another premise about not wanting to die; for instance, "We need to go buy all of the things that will keep us from dying."]

Note: Do homework for section 1.6 at this time.