2.6: Rewriting Arguments in Standard Form

Can you spot the conclusion and premises in this argument?

All machines have a finite working lifetime, and even though that big tree doesn’t look like a typical machine it is really just a biological machine; therefore, I believe it will stop working someday, too.

The claim “That big tree doesn’t look like a typical machine” is a discount claim. The argument’s conclusion is “That big tree will stop working someday.” This conclusion does not occur explicitly in the passage. The conclusion is slightly hidden in the words that follow the indicator word therefore. We readers have to figure out that the word it is referring to “that big tree,” and we must also mentally strip away the word too and the phrase I believe. The reason to remove “I believe” is that it is clear the arguing isn’t trying to convince that he or she believes the conclusion, but is trying to convince you that the conclusion is true. After appreciating all this, we can give the following more explicit picture of the argument:

All machines have a finite working lifetime.

That big tree is really just a biological machine.

That big tree will stop working someday.

Creating this clear list with the conclusion below the line is called rewriting the argument in standard form. In place of a line, if you add the symbol ∴ before the conclusion, then that is also putting the argument into standard form. The term “standard form” means standard format.

The argument we’ve been analyzing was originally a single sentence, but this one sentence now has been shown to be
composed of four statements, one being a discount claim and the other three being the core argument.

The process of transforming an argument into its standard form is like the subconscious mental process that occurs when a logical reasoner "sees the argument" in a passage. Normally, you would take the trouble to display the argument in standard form only when confronted with an especially complicated argument that you must figure out very carefully. Nobody is suggesting that from now on you sit down with the morning newspaper and rewrite all its arguments into standard form. However, trying your hand at rewriting a few simpler arguments will help build up your skill so you can succeed with more complicated arguments when the stakes are higher.

Here is a list of what you should pay attention to when rewriting an argument in standard form:

- List the premises, followed by the conclusion
- Remove extraneous sentences including discount phrases
- Remove indicator phrases
- Replace pronouns with their antecedents if possible
- Draw a line between the premises and the conclusion (or else place a ‘∴’ before the conclusion)
- Add implicit premises
- Remove ambiguity wherever possible
- There is no need to number the premises because premise order should not make any difference

Exercise (PageIndex{1})

Rewrite the following explicit argument in standard form. Do not bother with unstated assumptions.

Even though you might be tempted, never pick up a recently killed rattlesnake, because its nerve reflexes enable it to bite for some time after death.

**Answer**

It is important to remove the first pronoun from the premise. Here is the standard form of the explicit argument:

The nerve reflexes of a recently killed rattlesnake enable it to bite for some time after death.

You should never pick up a recently killed rattlesnake.

One implicit assumption here is that you don’t want to be bitten; another is that you should act in a way that avoids what you don’t want.