

$P \rightarrow Q$ means *If P then Q*.

$\sim R$ means *Not-R*.

$P \wedge Q$ means *P and Q*.

$P \vee Q$ means *P or Q*.

An argument is valid if the following conditional holds: *If all the premises are true, the conclusion must be true.*

Some valid argument forms:

(1) 1. P
2. $P \rightarrow Q$
C. Therefore, Q

(2) 1. $\sim Q$
2. $P \rightarrow Q$
C. Therefore, $\sim P$

(3) 1. P
2. Q
3. $(P \wedge Q) \rightarrow R$
C. Therefore, R

(4) 1. P
2. $P \rightarrow Q$
3. $Q \rightarrow R$
4. $R \rightarrow S$
C. Therefore, S

(5) 1. $P \rightarrow Q$
2. $Q \rightarrow R$
3. $\sim R$
C. Therefore, $\sim P$

(6) 1. $(P \vee Q) \rightarrow R$
2. P
C. Therefore, R.

(7) 1. $P \rightarrow Q$
2. $(P \rightarrow Q) \rightarrow (R \rightarrow S)$
C. Therefore, $R \rightarrow S$

Notice that this is structurally identical to (1)!

So, when you attempt to write a valid argument, you should try to write out what the logical structure of the argument is by symbolizing it.

There should not be any terms in the conclusion that haven't already appeared earlier in the argument. For example, you can't conclude anything about *what we can know* if none of your premises contains the word "know."

So consider this argument:

1. Perception about what direction of time is the future is entirely subjective
2. It's impossible to tell which direction is objectively future
3. The moving spotlight theory has an objective past, present, and future
- C. The moving spotlight theory is false

But the symbolic form of this argument, as it's written above, is:

1. P
2. Q
3. R
- C. S

Since none of the sentence parts are repeated! But obviously this isn't a valid argument form. We need to know what the relationship is between the premises. That is, whatever sentence letter is on the last line ought to have appeared earlier in the argument in some way.

Here is a better way of writing the argument:

1. A person could have all the same evidence I do but disagree with me about which direction is the future.
2. If a person could have all the same evidence I do but disagree with me about which direction is the future, then there is no objective fact of the matter about which direction is the future.
3. If there is no objective fact of the matter about which direction is the future, the moving spotlight theory is false.
4. The moving spotlight theory is false.

The structure of this argument is:

1. P
2. $P \rightarrow Q$
3. $Q \rightarrow R$
- C. R

Which is valid!