PHILOSOPHY 120

Stylistic Variants of negations and conditionals

This is a reminder about different ways to express our English connectives in symbolism. There is nothing new in here, but you might use it as a way to jog your memory from your old logic class.

Here some of the more common ways English has to express our connectives. These different ways are called "stylistic variants" (of the connectives). Each connective can be expressed in a variety of ways, and I will here give some of the more common ones. A word of warning is that there are differences in the meaning when you use one rather than another of these stylistic variants. But (and this is the important part) so far as the truth or falsity of the sentences being expressed goes, any one of the stylistic variants says the same thing. The differences in meaning have to do rather with the "expectations of the speaker" and the like... what the speaker is choosing to emphasize, and the like. For example, a person might choose to say "Y, if X" rather than "if X then Y"; and this might be because s/he wants the "Y" to be said first in order to be "out in the open". But the two sentences are either both true or else both false. That is, with regards to their truth-values and conditions under which they are true (or false) they say the same thing.

Keep in mind that not every use of a phrase of English follows the same rule. That is, sometimes a word (or phrase) is used in such a way as to violate what is reported here. What I am about to list is only the usual or common usages; you should allow your linguistic intuition to tell you when this is violated.

Common Stylistic variants of: ***it is not the case that P*** [negations, translated ~P]

it is false that P	P is not the case	P fails to occur	not-P
P is not true	P doesn't happen	P fails	

Additionally, it is most common to put the word "not" immediately beside the verb, inside of P. (Saying "is not" and the like). Also, there are a number of prefixes, such as *un-, il-, non-, ir-, im-, in-* which operate as a negation. But remember that P and not-P have to really be contradictory, in order to use our negation sign. E.g., *short* and *tall* cannot be translated as one being the negation of the other, since there are intermediate cases.

Common Stylistic variants of: ***If P then Q*** [conditionals, translated (P⊃Q)]. It is important to note which of the following is the *antecedent* of the conditional (the *if* clause) and which are the *consequent* of the conditional (the *then* clause). In all the following ways of saying a conditional, I have made P be the antecedent and Q be the consequent. I'll do all this in steps. First, I'll give a bunch of stylistic variants for the *if*:

If P then Q	Given that P, then Q	Insofar as P, then Q
In case P, then Q	So long as P, then Q	Provided that P, then Q
To the extent that P, then Q		Assuming that P, then Q
On the assumption that P, then Q		Whenever P, then Q

A common stylistic variant of *then* is simply to omit it (using a comma maybe). All of the ones

just given could have the *then* removed and use a comma.

Another common stylistic variant is (once the *then* is removed) to put the consequent *before* the antecedent. For example, we could have said any of the following and it would mean the same as any of the previous:

Q, if P	Q, given that P	Q, insofar as P
Q, in case P	Q, so long as P	Q, provided that P
Q, to the extent that P		Q, assuming that P
Q, on the assumption that P		Q, whenever P

The word *only* converts *if* (and any of its stylistic variants) into *then*!! This is <u>particularly</u> tricky. Any of the following mean the same as *if P then Q*

P only if Q	P only given that Q	P only insofar as Q
P only in case Q	P only provided that Q	P only to the extent that Q
P only on the assumption that Q		P only assuming that Q
P only when Q		

(etc). And of course, the consequent clauses (indicated by *only if* and the like in these last examples) can go before the antecedent clauses. The following all mean the same as *if P then Q*

only if Q, P	only given that Q, P	only when Q, P

(etc). And we can sometimes make these sound a little better by adding a few words:

only given that Q do we have P
only to the extent that we have Q will we have P

(etc). There are a few special ones. The following both mean *if P then Q*

P is a sufficient condition for Q	Q is a necessary condition for P

Finally there are some English phrases that sometimes mean *if--then* but are perhaps more usually used to indicate that there is a relation between premises and a conclusion:

P leads to Q	P entails Q	P implies that Q
Q follows from P	Q is entailed by P	Q is implied by P

(Also, on a few rare occasions the phrase *means that* seems like a conditional operator: When we say *Rain would mean that we have to cancel our picnic* seems to say *if it rains, then we will have to cancel our picnic*).