

Philosophy of Language and Logic

Reading summary

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The first three sections of Lewis' paper on counterfactuals cover roughly three topics. First is the matter of possible world semantics. Second is the defence of the claim that the counterfactual cannot be a strict conditional. Third is the defence of Lewis' analysis of the counterfactual as a variable conditional.

1 Possible world semantics

In possible world semantics, a world describes a certain state of things wherein all truth values are included. Worlds exist in accessibility relations to each other, every world (W_n) wherein the truth values are not impossible in relation to a starting world (A) makes for an accessibility relation between A and W_n . This relation is no necessarily symmetrical. It is generally taken that A is also in W .

Thus, we have for instance the actual world A and a set of worlds W which are accessible from A . Is a certain proposition ϕ is true in every world in W , then ϕ is necessary, expressed as $\Box\phi$. If ϕ holds true in at least one world in W , then ϕ is possible, expressed as $\Diamond\phi$. Of course $\Box\phi \supset \Diamond\phi$.

1.1 Counterfactual

Building on the existing notation, Lewis introduces a symbol for two counterfactuals $\Box\rightarrow$ and $\Diamond\rightarrow$ these two indicating respectively sentences of the structure "If it were the case that x then it *would* be the case that y " and "If it were the case that x then it *might* be the case that y ".

2 Strict conditional

Lewis then goes on to argue that $\Box\rightarrow$ can not be a strict conditional. Strict conditionals are conditionals of the type $\Box(\phi \supset \psi)$. Meaning that in every world accessible from the current one, the proposition $\phi \supset \psi$ holds true. This then, Lewis argues is distinctly different from saying "If it were the case that ϕ , then it would be the case that ψ ". The difference between strict conditionals and counterfactuals comes when we consider several of them together.

Lewis formulates various examples where new information to a given scenario reverses the outcome. Neither the first implication nor the one with

added information make the counterfactual act unlike a strict conditional, but any two taken together do.

I have one problem with Lewis' formulation, namely that his examples don't strictly hold true. "If you walk on the lawn, the lawn will be fine, but everyone did, the lawn would be ruined". The first part of this sentence is not true, because it assumes the information in the second one. As with most logical implicatures, there is a lot of background information that is silently assumed. So too for the party example, "If Otto had come, it would have been a lively party" says Lewis, but Otto came, and the party was not lively, because Otto's nemesis Anna was also present. The first statement is simply not true. If there is a party with a number of attendants, then the statement can be made that the party would have been lively *if only* Otto had come. But if the guest list is unknown, the statement is simply false.

Lewis then explains how the strictness of the strict conditional restricts it to certain accessibility relationships with possible worlds – or, as he calls them, spheres of influence. Taking the examples he gave before, he says that there exist no level of strictness wherein each statement is true on its own (with or without extraneous informations), but wherein they nevertheless do not contradict each other.

3 Variably strict conditionals

Having concluded that there is not level of strictness that allows the counterfactual to operate as a strict conditional, Lewis moves on to stating and defending his own point of view; that counterfactuals operate as variably strict conditionals. This allows for the existence of a set of spheres of influence for the examples above, wherein the sphere is such that it allows for truth in one case, whilst just missing out on the extra information which would falsify the statement in a different sphere.

In other words, the accessibility relations between words are such that new ones are added alongside the new information so as to change the possibilities.