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Title: Possible Worlds, Law-Violation, and Counterfactual Embedding

Counterfactuals, when true, are typically contingently true. That means that (Q > R) when true might have been false if some fact P had not obtained. So we accept: (P > ~(Q > R)). It is also the case that some counterfactuals are contingently false. (Q > R) is false, but had P been the case, it would have been true. That commits us to the embedding: (P > (Q > R). The explanation of contingency of counterfactuals is one reason--there are others—to accept counterfactual embedding, and in particular, the embedding of counterfactuals as consequent clauses in counterfactuals. My paper argues that the standard approach to the semantics of counterfactuals, based in the work of Lewis, is seriously challenged by embedding. The basic problem is the following.

According to Lewis, (P > Q) is true at @ iff the closest P-worlds to @ are Q-worlds. Take the deterministic case. Comparative similarity of P-worlds relative to @ is determined by a balance of maximizing regions where perfect match of particular with @ is found with degree of law violation. Typically, this balancing act means that the closest P-worlds will be worlds with some limited violation of the laws of @. Law violation is impossible. The closest P-worlds w are not worlds that have the same laws as @, but they are somehow violated in these worlds. Rather these worlds w have different laws. The laws of @ are in all factual instances obeyed in w except for certain isolated pockets of violation, but nevertheless w's laws are not those of @.

Lewis says nothing about the form of laws at the closest P-worlds w. This is not a crucial matter if we are considering simple counterfactuals (P > Q). But it does become a crucial matter when we consider compounds of the form (P > (Q >R)). In this case we have to evaluate (Q > R) in the closest P-worlds, and so determine comparative similarity for Q-worlds in relation to such P-worlds. This is, if Lewis is right, a matter of perfect match of particular fact and law violation. But now the issue of what the laws are at the P-worlds becomes crucial. I argue: (a) there is no fact of the matter about what the laws are at these P-worlds; (b) that this means that for Lewis some compound counterfactuals must lack any determinate truth-value; and (c) it is manifestly clear that these compounds are perfectly OK and have determinate truth-values from an intuitive point of view. In these cases we want to say that (Q > R) is contingently false, and that had P been the case, (Q> > R) would have been true, that is, (P > (Q > R)).