

## COUNTERFACTUALS

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A complete analysis of our ordinary use of counterfactual conditionals should provide us with a means of determining (at least in principle) the truth value of any ordinary counterfactual claim. Such an analysis is a much more ambitious project than I propose to undertake here. A more modest goal would be to provide a means of determining the *validity* of any ordinary counterfactual claim. This is still a very ambitious project, so I will concentrate on an account of the validity of counterfactuals which does not consider any problems of quantification. A number of authors have made recent attempts at developing an adequate conditional sentence logic. I will examine these attempts and pinpoint certain controversial assumptions upon which they are based. Then I will offer two new calculi which are based upon the denial of these assumptions. Finally, I will produce proof sketches of the semantical completeness and decidability of these two new systems using a method of proof for decidability unlike that of any other author writing on counterfactuals. I should warn the reader in advance that it is not my purpose to show the inadequacy of any of the systems I criticize; I am rather concerned with showing the diversity of uses we made of counterfactuals. The new logics I develop are not intended to replace those offered by others, but to augment their efforts. In short, I hope to show that we use counterfactuals on different occasions in different and even incompatible ways. Some of these usages—I would even claim some of the most common usages—have not been investigated until now.

Where “ $\succ$ ” is the counterfactual connective, there are three schemata crucial to my discussion:

- (1)  $(A \succ B) \vee (A \succ \neg B)$ ;
- (2)  $(A \& B) \supset (A \succ B)$ ;
- (3)  $\Box(A \supset B) \supset (B \succ C) \supset \Diamond(A \& C) \supset (A \succ C)$ .

In their article “A Semantical Analysis of Conditional Logic,”<sup>1</sup> Robert Stalnaker and Richmond Thomason construct two deductive systems, C1 and C2, both of which have (1) as a theorem schema. David Lewis, in