

MATERIAL IMPLICATION, CONFIRMATION, AND
 COUNTERFACTUALS

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1 Students of truth-functional logic frequently regard material implication to be patently absurd. Most of us who teach elementary logic have encountered intelligent students who frustratedly exclaimed something to the effect that: Any logic which pronounces true a sentence such as, "If the moon is green cheese, John F. Kennedy was 35th President of the United States," is illogical. A great deal of printer's ink has been spilled in the attempt to rationalize away the paradoxes of material implication: if a proposition p is false then, whatever proposition q may be, the proposition *if p then q* is true; and again if q is a true proposition then, whatever proposition p may be, the proposition *if p then q* is true. Although I have contributed to this effort myself,¹ I am at last inclined to throw in the towel and admit the endeavor is fruitless, that the paradoxes and problems generated by material implication are intolerable embarrassments. I am encouraged in my attitude of intolerance by the fruits this act of pruning will provide, as the essay proceeds.

Implicational propositions may be categorized, with respect to the determinability of the meaning and truth-value of the sentences which express them, as follows. In the first place, we have a proposition whose meaning and whose truth-value are determinate, such as:

(1) If John F. Kennedy was 35th President of the United States, he was assassinated in Dallas.

Next we need a proposition whose meaning is indeterminate as far as its audient or reader is concerned, and whose truth-value is, *a fortiori*, also indeterminate. Two types of propositions immediately come to mind. There are amphibolous constructions, such as the fatal oracle received by Croesus; and there are propositions expressed in an unfamiliar language, which one has reason to trust are serious and correct. A remark about amphibolous statements might be in order here. A wiser king than Croesus