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ON THE REAL LOGICAL STRUCTURE OF LEWIS' INDEPENDENT PROOF

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C. I. Lewis introduced strict implication into modern logic as a concept which "expresses precisely that relation which holds when valid deduction is possible and fails to hold when valid deduction is not possible", cf. [2], p. 247. This he did out of a certain dissatisfaction with material implication which he thought other logicians (such as Russell) had claimed to be capable of expressing the relation which interested him. Lewis argued that material implication fell short of the deducibility relation principally on account of the so-called paradoxes of material implication. As is well known, Lewis himself discovered early that strict implication was subject to analogous "paradoxes," and this at first shook his faith in the capabilities of his brain child. On recovering his faith, Lewis offered his famous proof for the thesis that the "paradoxes" of strict implication pointed to inescapable facts about deducibility "which are easily overlooked," cf. [2], p. 248. Lewis, of course, had no interest in just showing that rules could be specified such that the "paradoxes" might be seen to be logistically derivable. That would have been extremely unremarkable. What he wished to show is that there are rules of inference which are intuitively unexceptionable and which nevertheless unavoidably commit us to the "paradoxes." And this is the point of calling the proof "independent."

In the controversy which Lewis' claim has provoked, every single step in his argument has been disputed. It is not my intention in this paper to discuss the individual steps of the argument. I do, in fact, believe that Lewis did offer an acceptable proof for his claim, provided that deducibility is interpreted in such a way as to distinguish it from inferability. see

^{1.} It is interesting to note that Lewis himself considered the possibility of drawing a distinction between deducibility and inferability though, surprisingly, he did not propose it, cf. [2], p. 514.