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A MODIFICATION OF PARRY'S ANALYTIC IMPLICATION

J. MICHAEL DUNN

Parry [6] sets forth a system of sentential logic based upon the contention that for A to *analytically* imply B, every sentential variable that occurs in B must also occur in A. Parry's system is intended to be in step with Kant's notion of *analyticity*, and succeeds insofar as Parry is able to prove that $A \rightarrow B$ is a theorem of his system only if the above mentioned variable sharing criterion holds.

Parry's system might be better called a system of analytic *strict* implication since it is easily seen that every theorem of his system is a theorem of the Lewis modal logic S4. In this paper* we present a modification of Parry's system, the principal feature of which is a "demodalization" of Parry's original system which still preserves Parry's variable sharing criterion. We then give algebraic completeness results for this modified system, and show it decidable. These results parallel our work in [3] on RM and in [4] on LC.

1. Let us begin by presenting Parry's system for the sake of easy reference. Parry takes as primitive the connectives of negation, conjunction, and analytic implication, in our symbols -, &, and $\rightarrow$, respectively. Formation rules are as usual, and the connectives of analytic equivalence, disjunction, and material implication, in symbols, $\leftrightarrow$, v, and $\supset$, respectively, are introduced by definition in the usual manner. We take as axioms all instances of the following schemata, omitting parentheses according to the conventions of Church (as we do throughout the paper).

A1. $A \,\&\, B \rightarrow B \,\&\, A$
A2. $A \rightarrow A \,\&\, A$
A3. $A \rightarrow --A$
A4. $--A \rightarrow A$

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