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## STRICT AND MATERIAL IMPLICATION IN THE EARLY SIXTEENTH CENTURY

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One of the favorite games played by historians of logic is that of searching their sources for signs of the Lewis-Langford distinction between strict and material implication. There are three ways of going about this, but the first two are often reminiscent of the conjurer searching for his rabbit, and only the third has real merit, for it alone involves the study of what was said about the conditional as such. I shall look at each way in turn, in relation to writers of the early sixteenth century.

The first way, which I have at times pursued myself, involves spotting the equivalence.<sup>1</sup> If one discovers that an author admits the inference of '- $P \lor Q$ ' from 'if P then Q', then one has only to point to his acceptance of the rule 'P v Q, -P, therefore Q' and to saddle him with both 'P = --P' and the principle of conditionalization in order to claim that he was implicitly aware of the equivalence  $(P \supset Q) \equiv (-P \lor Q)$  and hence, of material implication. There are three drawbacks to this procedure. In the first place, if an acute logician like Caubraith or Enzinas, who both admitted the inference in question, was implicitly aware of material implication, why did the awareness never become explicit in this context? In the second place, had they become explicitly aware of the possibility of such an interpretation of the conditional they could well have rejected it. In the third place, those who discussed the matter made it quite clear that the disjunction derived from a conditional had to be a necessary one. All true conditionals are necessary, and no contingent proposition can be implied by a necessary proposition.<sup>2</sup>

Whether one could go the other way and derive a conditional from a disjunction was discussed in detail by Robert Caubraith.<sup>3</sup> He said that from a non-necessary disjunction like "Either Socrates does not run or Plato disputes" one could not derive the conditional "If Socrates runs, then Plato disputes", but that from "Either Socrates runs or Socrates does not run" one could derive the conditional "If Socrates does not run, then Socrates does not run." He also said that "Either Socrates does not run or an animal does" materially implies "If Socrates runs, then an animal runs",

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