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## THE "CONDITIONATIM"-CLAUSE: ONE OF THE PROBLEMS OF EXISTENTIAL IMPORT IN THE HISTORY OF LOGIC

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The discussion of the question whether one can legitimately infer 'Some man is white' from 'Every man is white' and of the related questions is almost as long as the history of the science of logic itself. I intend, in this paper,\* to sketch the already known stages of the discussion and then present in some detail a late-medieval phase which seems to have escaped the historians. This phase is the more interesting because it may be seen as a missing link between the so-called traditional and the modern views.

1 Looking at the Aristotelian syllogistic theory through the eyes of J. Łukasiewicz<sup>2</sup> we find the following as an assertable sentence:

$$CAablab$$

This sentence can be a logical thesis because it meets certain conditions of the metalanguage of elementary categorical syllogistic theory. Its terms, a and b, are replaceable only by terms which are general, non-negative, and referential. Thus, the term 'Socrates' does not satisfy this requirement, nor does the term 'non-man', nor the term 'mermaid'—each for different reasons. In the object language, the requirement of referentiality appears in the form of the axiom<sup>4</sup>

$$Iaa$$
 .

As compared with this, modern logicians a la Boole or Russell do not allow the transition from 'every' to 'some' without some special, explicitly stated presuppositions added conjunctively to the universal clause. Thus neither the sentence

(3) 
$$\alpha \cap \overline{\beta} = 0 \ . \supseteq . \ \alpha \cap \beta \neq 0$$

nor

$$(4) (x)(Fx \supset Gx) \supset (\exists x)(Fx . Gx)$$

is assertible as a thesis, unless we add conjunctively an explicit existential clause or clauses to the antecedents.<sup>5</sup>

<sup>\*</sup>An earlier version of this paper was presented at the Fourth International Congress for Logic, Methodology, and Philosophy of Science held in Bucharest, Rumania, August 29-September 4, 1971.