THE PROBLEM OF EXISTENTIAL IMPORT* (From George Boole to P. F. Strawson)

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In recent logical theories, one of the most striking features which mark the differences between Aristotelian and modern symbolic logic is the problem of existential import of universal categorical propositions. In the Aristotelian tradition, the subject of a universal proposition is assumed implicitly to be existential in the sense that the class denoted by the subject term has members. On the other hand, in modern symbolic logic the universal propositions are interpreted as non-existential in the sense of not implying the existence of members of the class denoted by the subject term. In the logic of the Aristotelian tradition, the problem of existential import was never raised.1 The problem has emerged only after the development of mathematical logic. After the publication of George Boole's The Mathematical Analysis of Logic in 1847,2 there has followed a series of discussions on this topic by logicians and mathematicians. The purpose of this paper is to give an expository account of the historical development of the problem in recent logical theories, from George Boole's logical innovation to P. F. Strawson's criticism of symbolic logic.

Although George Boole is the first to outline clearly the program of mathematical logic,³ he has no intention of instituting any direct comparison between his own treatise and the traditional system of the Aristotelian logic.⁴ The sharp contrast between the Boolean algebra of classes and Aristotelian logic in regard to the interpretation of the existential import of propositions is developed gradually through the studies of Franz Brentano, John Venn, Charles Peirce, and other modern logicians.

Brentano's *Psychologie vom empirischen Standpunkt*⁵ of 1874 is primarily a work in psychology. But it plays quite an important role in the

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