

PEIRCE'S DEVELOPMENT OF QUANTIFIERS
AND OF PREDICATE LOGIC

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Although there is adequate reference in the literature to the fact that Peirce did develop quantifiers,¹ I know of no study of their evaluation in his thought. This topic would seem to be of sufficient historical and theoretical interest to justify its presentation here.*

Charles Peirce had a metaphysical interest in logic. Throughout his career he was concerned with the problem of the categories, and, for a good part of this career, he thought that the key to the categories was to be found in logic. This interest in the categories seems to have been the stimulus of much of his early research in logic. And it was because of this interest that Peirce was attempting to elucidate the fundamental structure of logic and to develop a notation adequate for its treatment. (cf., e.g., 3.322) It was through these repeated attempts at an adequate notation that Peirce eventually arrived at the notion of quantifiers as we know them today.

In 1867, Peirce published his first paper dealing with Boole's logic. In that same year he also published his first papers on the problem of the categories and the theory of logic upon which his deduction of the categories was based. In this paper, I shall give a very general account of the relevant features of the theory of logic of 1867 and trace the subsequent developments that eventually led, in 1885, to quantifiers, and to predicate logic.

Peirce presented his deduction of the categories in 1867 in the paper "On a New List of Categories." (1.545-559) This paper was preceded by another in the same journal, entitled "On the Natural Classification of Arguments," (2.461-516) in which he described the theory of logic his

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