

A COMPENDIUM OF C. S. PEIRCE'S 1866-1885 WORK

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0 Introduction A short time ago Richard Beatty examined the evolution of Peirce's development of quantifiers. Beatty's treatment of the subject-matter is generally commendable and, as he suggests,¹ needed. Still, he makes a number of important historical and theoretical omissions. It is my purpose here to complete Beatty's work by making good his omissions.

1 General Observations Beatty nowhere mentions that Peirce (1885) and Frege (1879) were the first to publish systems of quantification theory.² Peirce's and Frege's development of quantification is well-known but worth mentioning in connection with Beatty's paper, since it is possible to trace Peirce's development of quantifiers and not Frege's.³ This is especially so in their respective treatments of I and 0 sentence forms.⁴

Beatty states that "Charles Peirce had a metaphysical interest in logic."⁵ Beatty adduces the evolution of Peirce's notation to be an accommodation to changes in his metaphysical categories.⁶ The passage he cites⁷ as an example concerns in fact Peirce's distinction between *logic* and *mathematics*. Peirce, admittedly, did not carry one systemic reduction of his views but propounded several, and each coincides with a period of his research in logic.⁸ Beatty, however, never takes into account Peirce's repeated distinction between the methods (such as hypothesis and deduction) employed in mathematics and those (such as observation and interpretation) employed in logic; therefore between L_a as *mathematics* and as *logic*. Peirce, for example, rejects logicism by means of this distinction.⁹ Furthermore, Peirce regards metaphysical concepts as "adopted from those of formal logic"¹⁰ but views the transposal adoption of such concepts as a "vicious order of thought."¹¹

A reader is apt to believe from Beatty's paper that Peirce's first article in logic was in 1867.¹² Actually, Peirce published four papers in logic that year.¹³ The first article in logic that Peirce produced was in 1866 and in it he recognized the principles in an inference to be distinct from those in its transformation (reduction).¹⁴ Beatty mentions that Peirce held a subject-copula-predicate theory of wffs during the period 1867-1884,¹⁵ but he fails to mention that during this period Peirce's interpretation