

PEIRCE'S LOGIC TODAY

(A Report on the Logic Program of the Peirce Sesquicentennial Congress)

by

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Mathematicians and logicians who pay attention to historical references have probably noticed that Charles Peirce is being mentioned with increasing frequency. In part this is because we are becoming more historically-minded, perhaps because we are growing less dogmatic about our foundations and are thus more open to earlier approaches, or maybe we are finally realizing that the community we are part of still includes those scholars who are no longer with us. But interest in Peirce's work is not all backward looking, not just for the historian who wants to become clearer about our roots and how old ideas have evolved into modern mathematics and logic. Part of what Peirce had to say has relevance for the newest and most forward looking areas of investigation. The growing and wide ranging interest in Peirce's work in logic and the foundations of mathematics was evident at the meetings of the Peirce Sesquicentennial Congress recently held at Harvard University and co-hosted by Texas Tech University.

From 5-10 September 1989 over two hundred and fifty scholars from around the world met in Cambridge to deliver papers on Peirce's work in the many fields to which he contributed. Most of the meetings were held in Sever Hall, which stands almost directly on the spot where Peirce's boyhood home stood in Harvard Yard. His father, Benjamin Peirce, Harvard's Professor of Mathematics and Astronomy and one of America's greatest mathematicians, had the benefit of a home on campus, provided by the University. Benjamin held his classes in the Peirce house, known by his students as "Function Hall" in honor of Benjamin

Peirce's great attachment to $\phi\psi$. It was appropriate that so many of the papers presented at the Congress, perhaps as many as one sixth, dealt with some aspect of Peirce's mathematical or logical contributions. It is to be regretted somewhat, however, that no sessions of contributed papers were devoted to Peirce's technical contributions to mathematics except as it pertains to logic or to foundations. The only session devoted fully to Peirce's mathematics was mainly philosophical and consisted of contributed papers by Claudine Engel-Tiercelin, Pesi R. Masani, R. Valentine Dusek, and Angela Ales Bello. Of more central interest to mathematicians, especially for historians of mathematics, was Carolyn Eisele's plenary lecture, "Peirce and Mathematics," and Helena Pycior's response, and the presidential address of Hillary Putnam (president of the congress) which dealt with Peirce's unique conception of continuity as Peirce had presented it in his Harvard Lectures of 1903.

The logic program, however, was quite full and covered much ground, a fitting tribute to the first, and perhaps still the only, scholar to list his profession as logician for *Who's Who*. Peirce was also the first scholar admitted to the National Academy of Science for his work in logic. Willard Van Orman Quine is the second. As co-organizer (with Don D. Roberts) of some of the logic sessions, I was asked to prepare a report on the Congress, concentrating on papers that would likely be of most interest to readers of *Modern Logic*. Toward that end, I have