

Charles Sanders Peirce

C. S. Peirce

A Life

REVISED AND
ENLARGED EDITION

J O S E P H B R E N T

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INTRODUCTION

Facets of the Puzzle

[I intend] to make a philosophy like that of Aristotle, that is to say, to outline a theory so comprehensive that, for a long time to come, the entire work of human reason, in philosophy of every school and kind, in mathematics, in psychology, in physical science, in history, in sociology, and in whatever other department there may be, shall appear as the filling up of its details.

CSP, "A Guess at the Riddle," 1887

The past is a city in ruins—melancholy debris of the feast. The past haunts us with vague recognitions and inspires in us a musing curiosity about our seamless continuity with it. We guess at the riddle it embodies as we wander its vast reach lost in concepts, hunting for clues, inquiring of our ancestors about the signs of their times, and uncovering symptoms of our own malaise. We are pierced by time's barbed arrow, and from that irresistible outward clash we know that our universe is irreversible. The beauty of the past arises from its permanence, from the impossibility of changing what was done. It is this forgiving permanence, suffusing even folly and tragedy with melancholy beauty, that transforms the brilliant, bitter, humiliating, and above all tragic life of the American philosopher Charles Sanders Peirce into an odyssey of spirit which is at once fascinating, saddening, and compelling. Peirce died at the age of seventy-four in the spring of 1914, five months before the guns of August thundered abroad the beginnings of the First World War and the end of an age whose dominant values he despised.

In 1934, the philosopher Paul Weiss, in his brief account of Peirce's life in the *Dictionary of American Biography*, called him "the most original and versatile of American philosophers and America's greatest logician," but outside the philosophic community his name and work are even now little known. Even among philosophers, he is usually mentioned only in passing as the

founder of pragmatism, even though Peirce scholars, both here and abroad, continue to add to what has become an extensive body of specialized studies of his work. Three years before Weiss's article, in the epigraph to the book he called *Brown Decades* to characterize a people sobered by the deep-set horror of the Civil War, the cultural historian and critic of the arts Lewis Mumford named a number of forgotten Americans who he believed had created a revolution in thought in the 1870s. Among them were the painters Thomas Eakins and Albert Pinkham Ryder, the designer and builder of the Brooklyn Bridge John August Roebling, the architects Henry Hobson Richardson and Louis Sullivan, the pioneering ecologist George Perkins Marsh, the physicist Josiah Willard Gibbs, and the historian and writer Henry Adams; "the procession of American civilization divided and walked around these men": and the first name on the list was that of Charles Peirce.¹ In an earlier essay in which he deplored the fact that Peirce's philosophical work had not been published (an undertaking that had a difficult birth in 1931, seventeen years after his death), Mumford placed Peirce in very great company indeed:

The mere failure to publish the greater parts of Peirce's thought has obscured the fact that, in the very dregs of the Gilded Age, a large and universal mind quietly fulfilled itself, a mind whose depth and impact have still to be felt and fathomed. If one is to condemn the Gilded Age for Peirce's lack of influence, one must equally condemn the glorious thirteenth century for the comparative obscurity of Roger Bacon, or the sixteenth century for not publishing the notes of Leonardo da Vinci. Doubtless the condemnation would be deserved, but the glory of their positive achievements still remains.²

Max H. Fisch, who spent fifty years in the dedicated study of Peirce's life and thought, offered a far more knowledgeable and even grander judgment of Peirce's achievements:

Who is the most original and the most versatile intellect that the Americas have so far produced? The answer "Charles S. Peirce" is uncontested, because any second would be so far behind as not to be worth nominating. Mathematician, astronomer, chemist, geodesist, surveyor, cartographer, metrologist, spectroscopist, engineer, inventor; psychologist, philologist, lexicographer, historian of science, mathematical economist, lifelong student of medicine; book reviewer, dramatist, actor, short story writer; phenomenologist, semiotician, logician, rhetorician [and] metaphysician[.] He was, for a few examples, the first modern experimental psychologist in the Americas, the first metrologist to use a wave-length of light as a unit of measure, the inventor of the quincuncial projection of the sphere, the first known conceiver of the design and theory of an electric switching-circuit computer, and the founder of "the economy of research." He is the only system-build-

ing philosopher in the Americas who has been both competent and productive in logic, in mathematics, and in a wide range of sciences. If he has had any equals in that respect in the entire history of philosophy, they do not number more than two.³

Fisch then went on to list some of Peirce's many achievements, including his graduation from Harvard University's Lawrence Scientific School *summa cum laude* in 1863; his thirty-year career as a research scientist in the Coast and Geodetic Survey, which ended in 1891 and during which he became the first American delegate to any international scientific association; his influential lectureship in logic at the Johns Hopkins University from 1879 to 1884; his courses of lectures at Harvard in 1865, 1869–70, 1903, and 1907, and at private homes in Cambridge in 1898 and in other years; his reviewing for the *Nation* from 1869 to 1908; his many and major contributions to the *Century Dictionary* and to James Mark Baldwin's *Dictionary of Philosophy and Psychology*; and his membership in learned societies such as the American Academy of Arts and Sciences, the National Academy of Sciences, and the London Mathematical Society. Fisch identified Peirce's major focus in the great range of his inquiries as logic,

conceived at first as a branch of a branch of semiotics [the study of signs and their function and interpretation, what Peirce called "the science of representation"], but eventually as nearly coextensive with it, though with a distribution of emphasis different from those of semioticians who are not logicians. The purpose was to distinguish the possible kinds of semioses or sign-functions, and, among them, to make the most thorough study he could of arguments in particular, and above all of their functions in mathematics and in the sciences. His major single discovery was that what he at first called *hypothesis* and later *abduction* or *retroduction* [now often called the logic of discovery] is a distinct kind of argument, different both from deduction and from induction, and indispensable both in mathematics and in the sciences. This discovery came at least as early as 1866. . . .

Whatever the technical name and definition of this third kind of argument should be, and the exact working out of its relations with the other two, an essential element of it is something for which the colloquial name is *guessing*.⁴

Fisch accurately places Peirce's work at the source and center of all inquiry, be it scientific, biographical, literary, or whatever. However, he does not respond to the extraordinarily daring, grand, and powerful vision which Peirce expressed in his intention "to outline a theory so comprehensive that . . . the entire work of human reason . . . shall appear as the filling up of its details." Nor does he recognize the hubris manifest in Peirce's intention to

