IN THE WORKS: The Lost Report

There have been many rewarding discoveries of Peirce manuscripts since Max Fiisch began the systematic search of public and private archives in the 1950s. The 1968 discovery of Peirce’s "Report on Gravity at the Smithsonian, Ann Arbor, Madison, and Cornell" (1889), known today simply as the Lost Report, represents one of the most significant finds to date. Now, nearly 30 years later (and more than a century after its suppression), the Lost Report is being edited for inclusion in Volume 6 of the Writings.

The 140 oversized typescript leaves of the report chronicle Peirce’s decade-long attempt to obtain gravity values across North America. His pioneering refinements in the design and use of gravity pendulums—the instrument used to measure gravity since Galileo’s time—were essential to the topographic and hydrographic mapping of the continent. Moreover, European geodesists were counting on Peirce to link his field stations with the international effort to establish the true figure of the earth. But Peirce was working without sufficient funding or computational support, and was only able to complete a report for his base station (the Smithsonian) and three field stations approximating an arc along the 43rd parallel.

Thousands of data sheets from these stations (and from stations occupied by Peirce along a vast meridional arc from Montreal to Key West) survive in Peirce’s Harvard papers and in the Coast Survey records deposited in the National Archives; these documents, as well as plentiful references to this work in Peirce’s official correspondence, led University of California (Berkeley) professor Victor Lenzen to attempt to reconstruct the existence of the Lost Report and to begin an exhaustive search for it. When investigations resulted in the discovery of the report by Coast Survey archivists, Lenzen became the first twenty-first-century scientist to examine the document.1 Lenzen, best known as a philosopher of science, was not unfamiliar with Peirce’s work; as a young graduate student, he had actually moved Peirce’s papers from Aribse to Harvard in 1915. In his analysis of the Lost Report, Lenzen discovered that Peirce presented his procedures and station values for gravity ahead of his data, in much the same way that a modern researcher provides a descriptive abstract as overview to a scientific publication.

As it turned out, Peirce’s “results first” approach provided the key to understanding why the Lost Report was suppressed. This form of presentation was not favored in the last century, and Peirce was directed to rewrite the report; he was also ordered to report on his other gravity stations as soon as possible. Peirce was unable or unwilling to comply with either directive. Citing his own misgivings and the negative reports of outside reviewers (Simon Newcomb’s proved least informed but most damaging), Survey Superintendent T. C. Mendenhall refused publication and, on the basis of Peirce’s lack of publishable production, asked for his resignation from the Survey in 1891. Much of the report data would eventually be used by Peirce’s Survey colleagues (without adequate attribution) to prepare more general reports on North American gravity stations; in 1894, Mendenhall would tell a congressional committee that Peirce’s gravity determinations were, simply, inadequate.2

Peirce accepted his dismissal with uncharacteristic calm—he had known for some years that a break with the Survey was inevitable. He had fought a losing battle against a dwindling budget since 1885, and his refusal to work in Washington stretched his working relationship with successive superintendents to the breaking point. But bureaucracy is rarely the match for genius over the long haul. When Victor Lenzen studied Peirce’s final value for gravity as determined in the Lost Report, he found that Peirce’s results were as close to computer-age determinations as the best published values presented in Europe or America prior to the twentieth century.3

In 1977, the Lost Report was filmed as part of the Complete Published Works microfiche collection (P385, fiche 89–92). Ken Kerner’s decision to film this unpublished and unedited text is a fair indication of its continuing importance to Peirce scholars. Today, the Lost Report presents some interesting editing challenges as it is prepared to appear in print for the first time. The document that Peirce turned over to Mendenhall in November 1889 was a 140-page conflation of new and old typescript carbons. It evolved from three earlier forms of the work: reductions of the raw

Leaf 106 of the final typescript, assembled by Peirce from four partial leaves of the first typescript, begins the summary of final correction factors for the gravity stations.