Claremont Colleges
Scholarship @ Claremont

Pitzer Faculty Publications and Research | Pitzer Faculty Scholarship

1-1-2005

Review: Roger Hahn, Pierre Simon Laplace, 1749-1827: A Determined Scientist (Cambridge, Mass., 2005)

Andre Wakefield
Pitzer College

Recommended Citation
Andre Wakefield. Review of Hahn, Roger, Pierre Simon Laplace, 1749-1827: A Determined Scientist. Technology and Culture 48.1 (January 2005): 221-222.

This Book Review is brought to you for free and open access by the Pitzer Faculty Scholarship at Scholarship @ Claremont. It has been accepted for inclusion in Pitzer Faculty Publications and Research by an authorized administrator of Scholarship @ Claremont. For more information, please contact scholarship@cuc.claremont.edu.

Pierre Simon Laplace, 1749–1827: A Determined Scientist.

By Roger Hahn. Cambridge, Mass.: Harvard University Press, 2005. Pp. xi+310. $35.

This is not a trendy book. It does not contain grand theoretical declarations or romantic portraits of daring scientists. Roger Hahn is skeptical of overblown claims and unsupported stories. His book mirrors his subject—deliberate, unsentimental, and rigorous. In other words, Hahn offers us a well-written and painstakingly researched biography of "the Newton of France." It is an important contribution.

The book begins at the beginning, in Laplace's hometown of Beaumont-en-Auge in Normandy. Drawing on social histories and local archives, Hahn suggests that there was nothing especially remarkable about the young Laplace. His small-town family was relatively prosperous and, after he attended a Benedictine priory and university in Caen, he seemed destined for a life in the Church. But then Laplace did something unexpected; he went to Paris: "Armed with a letter of recommendation from his teachers, he traveled to the Mecca of science, knocking at d'Alembert's door with a mathematical essay in hand" (p. 31).

Although the author debunks many myths in this book, the legend of the "country bumpkin" Laplace arriving in Paris in 1769 with nothing more than his wits and a letter of recommendation holds up pretty well. Moreover, Hahn presents it as the turning point in his life and does a nice job of showing just how risky and unusual a move this was for Laplace, who rejected the promise of a secure position in Normandy for the uncertainties of a scientific career in the capital.

Having secured the favor and patronage of d'Alembert, Laplace worked like a demon to advance his career, and he succeeded. After four years in Paris, at the young age of twenty-four he was elected to the Paris Academy of Sciences. It was a remarkable feat, accomplished through "a combination of extraordinary abilities and perseverance, as well as the backing of d'Alembert" (p. 41). (Not surprisingly, given that Hahn has written the authoritative work on the Paris Academy, the sections on Laplace and the Académie—its politics, milieu, and personalities—are expertly handled.) Even within changing circumstances, Laplace's character remained constant. He was no salon guy or social butterfly and, at least in the 1770s, he pretty much kept to himself, partly because he had no money and partly because of his "determined, resolute, and almost obsessive character" (p. 43).

Hahn is quite good at filling out the picture where Laplace's famous determinism is concerned. While emphasizing well-known influences such as Condorcet, d'Alembert, and the Newtonian program, he also highlights less familiar factors, like the literary tradition in Caen where Laplace studied as a young man. Hahn argues that the young Laplace suppressed his true

Cartesian leanings and embraced d'Alembert's "pre-positivist" rejection of metaphysics. At the same time, however, Laplace never completely abandoned these older metaphysical concerns, which were to resurface later. Much of his deterministic credo simply echoed important contemporaries like d'Alembert. What made Laplace's stance truly innovative, Hahn argues, was its linkage to probability theory. The book is especially good at contextualizing Laplace's determinism. The author reminds us that Laplace's famous ruminations on an omniscient intellect were part of a much larger discussion that included figures such as Leibniz, Bernoulli, and Maupertius.

Hahn guides the reader carefully and deliberately through the remarkable production of Laplace's middle years, a period in which he worked feverishly to demonstrate the stability of the solar system and endeavored to link celestial mechanics with terrestrial physics. These labors were briefly interrupted by the French Revolution, which he weathered surprisingly well, becoming one of the few prominent scientific men who managed to thrive both before and after the Terror. Unlike many of his colleagues and contemporaries, Laplace managed to remain politically neutral. These instincts for self-preservation, and a fortuitous encounter with the young Napoleon Bonaparte, helped launch Laplace to prominence after the Revolution.

Toward the end of his career, Laplace turned philosophical, assuming the roles of d'Alembert and Condorcet—those great spokesmen of the sciences who had preceded him. In his later years, for example, Laplace ruminated on the themes of probability and determinism that have defined his legacy, and he speculated on the potential uses of probability theory in human affairs. Many of these issues appear in the four nonscientific manuscripts that Hahn has appended at the end of the book.

As I reread some familiar passages from Laplace's *Essai philosophique* the other day, they resonated with new meaning and specificity, which is a tribute to Hahn's carefully understated, meticulous, and judicious biography.

ANDRE WAKEFIELD

Dr. Wakefield is assistant professor of history at Pitzer College in Claremont, California.

Henri Le Châtelier (1850–1936): ou la science appliquée à l'industrie.

By Michel Letté. Rennes, France: Presses universitaires de Rennes, 2004. Pp. 258. €19.

This biography of Henri Le Châtelier is based on Michel Letté's Ph.D. dissertation, defended in 1998 in Paris at the EHESS. Probably with a wider readership in mind, the published version is much shorter and a sort of hybrid. The book is "lighter" than the dissertation with fewer footnotes and a shorter bibliography, but it is neither an intimate biography that nonacademics would like to read nor a heroic tale. Academics interested in Le