

# Henry E. Guerlac

*June 14, 1910 — May 29, 1985*

Henry Guerlac was a born Cornellian. His maternal grandfather, Francis Miles Finch, was a distinguished Ithaca jurist, who drew up the charter for Cornell University and served on its first board of trustees. His mother, Helen Finch, was an accomplished pianist, who fostered her only child's considerable musical talent by forbidding him to touch her piano. His father, Othon Guerlac, a French journalist sent from Paris to cover the Klondike, sensibly stopped when he reached Ithaca and became a professor of French at Cornell. Although Henry's grandfather had gone to Yale, there never seemed to be any doubt that he would go to Cornell. He was, in fact, to spend almost all his life in Ithaca and most of his professional life as a teacher at his beloved alma mater.

As a youth Henry took full advantage of the many joys of Ithaca. He was an enthusiastic Boy Scout, studying birds with Louis Fuertes and entomology with Chester Bradley and learning to identify poison ivy in the winter. His early schooling was in Ithaca, but a year in a French lycée helped revive the French that had been his first language. It was in France that he first made contact with the great thinkers of the Enlightenment, whose literary style, liberal values, and inquiring minds were to serve him ever after both as models and as subjects. In 1982 the French government awarded him the Legion of Honor for his contributions to the understanding of French science and culture.

In 1928 Henry Guerlac entered Cornell as a premedical student, partly as a gesture of independence from a humanistic background. When he was elected to Sigma Psi, the honorary science society, in his senior year, his father was mildly impressed but predicted, "You'll be back."

In 1932 Henry received his B.A. degree and stayed on at Cornell to take a master's degree under James Sumner, Cornell's first Nobel laureate. In the intervening summer he went to Woods Hole, Massachusetts, where he extended his biological knowledge and sharpened his experimental skills. His master's thesis marked his first excursion into the history of science, for he wrote a small history of narcosis, beginning with the researches of Claude Bernard, as background for his own work. Another summer at Woods Hole followed, during which he read and was excited by L. J. Henderson's *The Fitness of the Environment*.

Determined to study under Henderson, he hitchhiked to Cambridge, knocked on Henderson's door, presented his first reprint, and offered himself as a graduate student. In autumn 1933 he became an assistant in Harvard's Fatigue Laboratory, acting, somewhat to his surprise, more often as a subject than original investigator. Gradually

he moved into biochemistry and then into history. Election to the Harvard Society of Fellows gave him the freedom to make the final jump. It was, again, Cornell, acting upon him at a distance, that provided the decisive impetus. As he later wrote: "A love of European history had been instilled in me by my father, whose closest friends on the Cornell faculty were men like Preserved Smith, George Lincoln Burr, M. L. W. Laistner, and Carl Becker. I wanted to be trained in the historians' craft."

In 1941 Henry Guerlac was awarded the Ph.D. degree in European history (not history of science, although he took some courses from George Sarton), having written a dissertation on the Engineering School of Mézières, France, under the Old Regime. That August he married Rita Carey, another Ithaca Cornellian and a classicist, whose Latin and scholarly training was occasionally useful to his own researches.

The course of those researches for the next twenty years had been set during a trip to Europe in 1939 to gather material for his thesis. While in Paris, he learned of unpublished Lavoisier manuscript material and determined to bring it to light and use it in the study of Lavoisier's work. He arrived back in New York the day after World War II began, so that work had to be deferred until after 1945.

In 1941 Henry took up an appointment at the University of Wisconsin as an assistant professor, charged with setting up the first independent Department of the History of Science. After Pearl Harbor he tried, unsuccessfully, to enlist and then accepted the position of historian with the Radiation Laboratory at Massachusetts Institute of Technology. He spent the war years there, where he was author-editor of the official history of United States radar, soon to be published as *Radar in World War II*.

As he was finishing his radar history, Cornell offered him a new position in the Department of History; his primary responsibility would be to teach a required course in the history of science for all junior and senior engineering students. In 1946 he came back to Cornell as a full professor. In 1964 he was named Goldwin Smith Professor, a title he held until his retirement in 1975, when he became professor emeritus.

These bare outlines of Henry Guerlac's career cannot begin to do justice to his eminence. A few words must be said about his achievements as scholar, as teacher, and as devoted supporter of the humanities and of learning.

It is given to few scholars to found a new field of intellectual endeavor. Henry Guerlac was one of those fortunate people. He and the Russian émigré Alexandre Koyre, in Paris, raised the history of science from an uncritical chronicle to the stature of intellectual history. Koyre showed that science was deeply involved with philosophical questions that could not be ignored if the modern world was to be understood. Henry insisted upon and illustrated

the necessity of placing these ideas in real historical context. Henry was the first historian of modern science systematically to use manuscript and other archival materials to reveal the backings and fillings and turnings, the hesitations, the downright errors, of scientists. Unlike Sarton, who saw the history of science as the steady forward march of reason, Guerlac knew that scientists were and are human, subject to all the foibles and defects of humanity.

In some seventy beautiful and lapidary articles and five books on Lavoisier and the chemical revolution and on Newton's physics, Henry taught the whole profession of historians of science how to do real history, using manuscripts, published articles, philosophy, technology, and all other subjects that could cast light upon his subject. Someone once wrote that God is in the details. Henry knew this was also true of history. It was in recognition of his scholarly leadership that he was twice elected president of both the History of Science Society of America and the Académie Internationale d'Histoire des Sciences.

Henry Guerlac was a brilliant teacher of both undergraduate and graduate students. It is no mean feat to hold an audience of 350 reluctant engineers, dragooned into a required course, enthralled day after day. To many of those who took History 165-166, this was their favorite subject, to be remembered with admiration and affection years later at reunions.

For graduate students, working with Henry Guerlac was like living on the slopes of Mount St. Helens. Ideas flashed through his head like lightning around a volcano, and a half hour with him left one almost exhausted from the intellectual stimulation he provided. After an evening seminar in his library at 3 Fountain Place, his graduate students found it impossible to sleep for hours afterwards, as they mulled and considered all the insights and criticisms that had accompanied their presentations. One of his older students recently remarked that a talk with Henry left her eager to go out and write the four or so books that his ideas had suggested to her in ten minutes. These students have gone on to hold major positions at Imperial College, London; Vassar; Johns Hopkins University; the University of Washington; the University of California at Berkeley; York University in Toronto; the New School in New York; Cornell; and the Institute for Advanced Study.

Henry's intellectual energies could never be confined to the classroom. At Cornell he was a founding and active member of a faculty group called the Vicious Circle, devoted to intellectual discourse and penetrating mutual criticism of one another's ideas. One of the cofounders recalls Henry as a reincarnation of an Enlightenment *philosophe*, knowledgeable in an incredibly wide range of subjects, careful in his discourse, and thoroughly in love with the cut and thrust of intellectual debate.

Henry's concern for the intellectual world was manifest in two important innovations at Cornell. When former president James Perkins was trying to discover a way of honoring academics that would not break the Cornell tradition of not conferring honorary degrees, Professor Max Black and Henry and Rita Guerlac put together the plan that led to the creation of the Professors-at-Large program. This program is unique, for both the elected professors and the whole Cornell community benefit from it.

One of Henry's most lively concerns was the Society for the Humanities, of which he was director from 1970 to 1977. He was instrumental in bringing many distinguished humanists, senior and junior, to Cornell, either as Fellows or for individual lectures or as participants in conferences. His own range of interests, his concern for interdisciplinary studies, and his international distinction made him an ideal selection for this important position. During his directorship the Society's international reputation grew markedly, and Cornell's visibility increased as a center of humanistic studies. Important conferences were organized—on humanistic aspects of the problems of the city, on historical thought in America, on Petrarch, on the Scottish Enlightenment—with speakers from off campus as well as from Cornell.

Perhaps the most important event during Henry's directorship was the Society's move, in fall 1973, from Wait Avenue to its present location, an event made possible by an immense amount of work on Henry's part, first to save the house from demolition and then to use it most efficiently and, with Rita's help, to furnish it in a manner appropriate both to its past traditions and its present uses. In this he was assisted by a group of loyal alumni that he called the "Friends of the Andrew D. White House." The general plan of activities inaugurated by the first planning committee and the first director, Max Black, was continued by Henry and expanded in various directions. He instituted a new category of Visiting Fellow, for scholars supported by outside funds who wanted to spend time at Cornell; he established the annual Invitational Lecture given by a Cornell humanist; and he inaugurated a freshman humanities course, "Science as Literature," which developed into a popular and highly appreciated course. Above all, he created an ambiance of warmth and vitality in which ideas could thrive and be freely exchanged. At times he worried about the financial future of the Society and how long it could last. The present flourishing slate of the Society, soon to embark on its third decade, is a tribute and memorial to his devotion, hard work, and imagination.

Finally, Henry was influential in creating at Cornell a center for research in the history of science. By great good fortune, his arrival in 1946 coincided with that of Felix Reichmann, one of the finest acquisitions librarians Cornell has ever had. Together they built up a fabulous collection that brings scholars to Ithaca from all over the world.

Henry Guerlac was born in the last year that Halley's comet appeared and died just as it began its next close passage to the sun. It was, of course, Isaac Newton who provided Halley with the astronomical science that permitted the determination of the comet's period, and it was on Isaac Newton that Henry spent the last years of his scholarship. We may, therefore, perhaps be permitted to paraphrase Newton and suggest that those who follow Henry Guerlac in the history of science at Cornell will indeed be standing upon the shoulders of a giant.

*Eric Blackall, Milton Konvitz, L. Pearce Williams*