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OBITUARY: Thomas S. Kuhn*

H. Pierre Noyes

Stanford Linear Accelerator Center

Stanford University, Stanford, CA 94309

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Thomas S. Kuhn, creator of the paradigm and setter of the standards for the study and teaching of the history of science in this century died of lung cancer at the age of 73. He was born in Cincinnati, Ohio July 18, 1922, son of Samuel Louis and Minette (née Strook) Kuhn, prepared at Taft School, Watertown, Connecticut and took an accelerated wartime degree in physics, *summa cum laude* at Harvard College in 1943. This prepared him for civilian service in the European Theatre as part of the countermeasures program which frustrated the anti-aircraft gun-laying radar, saving the lives of many airmen and greatly increasing the effectiveness of the air war against Nazi Germany. Returned to Harvard he passed his PhD oral in physics in 1948 and nine days later married Kathryn Muhs, whom he divorced 30 years later. She and their three children (Sarah, Liza and Nat) survive him, as does his second wife Jehane R. Burns (née Barton) whom he married on October 25, 1981.

While Tom was doing his graduate research work in solid state physics, James Conant engaged him in teaching case studies in the history of science. He was struck by the fact that old science was different science rather than bad science, and tracking down this insight became his life work. He was a Junior Fellow and Assistant Professor at Harvard, but left to start a history of science program at UC Berkeley in 1957. In 1958-59 he took leave to be a Fellow at the Center for Advanced Study in the Behavioral Sciences, where he drafted the work which made him famous.

When Tom Kuhn gave me an early draft of *The Structure of Scientific Revolutions* for comment and criticism, I was unprepared for the intellectual excitement it would awaken in me and others. That the “paradigm shift” which distinguishes revolutionary from normal science is similar to a “gestalt switch” struck me as illuminating, and my response was enthusiastic. I later came to realize how hesitant he was to publish his radical ideas without support from a physicist actively engaged in research. He once told me how difficult it was for him the first time he presented one of his historical studies to an audience of physicists and how timorously he watched the Nobel laureates in the front row — a custom at Berkeley, as elsewhere — for their response. Only when he saw Segré nodding with approval was he able to begin to relax.

I mention this incident because it emphasizes his extreme commitment to the highest level of professional standards in both history and science. Although initially

trained in physics, he used his Junior Fellowship at Harvard to also train himself as a professional historian. He insisted on similar high standards in those he trained and in the departments and programs in history of science he has been instrumental in forming. There is no doubt that teaching and research in the history of science in this country have been profoundly altered by Tom Kuhn's career. As to his reasons for leaving the University of California to go to Princeton, he later remarked "Though some of my dearest and most admired friends have stayed, my own years there were marred by constant doubts, often deep, personal and destructive, about its integrity as an educational institution. We left in 1964 just before some of my long-standing malaise became public property through the beginnings of student demonstrations."

He remained sensitive to the political climate, remarking in his 1969 report to his Harvard classmates: "What odds, classmates, that the Presidential election of 1968 will not be the last for some time? And what price the life of the mind under such circumstances? There is no question I ask myself more persistently these days, midway through a career in which political activity and the more immediate forms of public service have so far been notably lacking. I have found no answer except a personal conviction that my *special* talents, if any, will make a difference only if there is a long pull."

Because of Tom's emphasis on professionalism, I find it ironic that he has often been interpreted by the public as supporting the view that science is just a matter of opinion without basis in fact! He may have enjoyed the notoriety this interpretation gave to his work. I got the feeling from him in later years that he did not quite know how to repudiate the irrational component in this support without blunting the edge of his justified attack on the complacency of the scientific establishment. So far as the mechanism for scientific revolution goes, the importance of paradigm shift as compared, for instance, with technological advance may be fruitfully questioned in specific contexts. But the episodic, rather than linear, nature of scientific change richly deserves the emphasis Tom Kuhn gave it. His contributions to his field were recognized by the Behrman Award (Princeton) 1977, election to the National Academy of Sciences (Behavioral and Political Sci.) 1979, Sarton Medal (History of Science Soc.) 1982, Bernal Award (Soc. for Social Studies in Science) 1983.

He undertook the task of obtaining interviews with the founders of quantum mechanics who were still living, despite his acute awareness of the fact that in later years scientists are prone to remember their work in ways which can often be proved from the written record to be false. That the record this project produced contains valuable information for future historians is due to the care Tom took in training his interviewers with this trap in mind.

Back in the '60's, when Tom was discussing with me how he got into his field in the first place, Tom said that his study of physics had at first aroused in him a concern with the philosophy of science. However, he soon discovered that he could not understand the philosophy without first understanding the history. It was therefore appropriate that, after a long detour, he ended his career as a Professor of Philosophy at MIT (1979-83) and Lawrence S. Rockefeller Philosophy Professor (1983-91). In 1994 he informed us that "Two years after retirement, I am deeply engaged in the preparation of a book that excites me more than any work I have previously done. If I get to the end of it, I am likely to have at last resolved my longstanding obsessions with the nature of scientific knowledge and with the sense in which it can properly be said to increase." We can only hope that enough of this material has survived, and will eventually be published, so that the rest of us can benefit, for a last time, from the remarkable insights of this dedicated scholar.

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