## Hys History of Science Society



2023 Sarton Medalist

## **Theodore Porter**

Ted Porter is, quite simply, one of the world's most distinguished historians of science. Over his long career he has been responsible not just for transforming an existing field (the history of statistics and statistical practice) but for actually creating a new one: the history of quantification. In the broadest sense, Ted's accomplishment has been to connect histories of statistical practice to histories of scientific epistemology—in other words, to investigate the ways in which quantification grew, over the 19th and early 20th centuries, to incorporate a political and cultural worldview extending well beyond just statistical applications in the natural and applied sciences. In other words, Ted played a key role in our appreciation of statistics not just as a set of techniques and practices, but what some historians have called an "epistemic virtue" tied to shifting notions of rationality, objectivity, and control. Other historians have certainly contributed to this project as well—many of whom have been close collaborators with Ted—but Ted has, from the publication of his first book in 1986, established himself at the very center of this historiographic shift, and his succeeding publications have consistently pushed us to consider new questions, contexts, and consequences of "the rise of statistical thinking" and "trust in numbers."

Ted began his professional career with a PhD in History from Princeton in 1981, and his dissertation was the eventual basis for his first book, The Rise of Statistical Thinking, 1820-1900 (Princeton, 1986). Ted's first monograph made an immediate impact: it was the first synthetic account of the development of 19th-century statistics as an epistemology, and not just a practice. Drawing together scientific, bureaucratic, and economic strands, Ted illustrated the ways in which quantification became a way of "thinking" about the world and its constituents by following concepts like the normal probability curve that moved across disciplines and recast the ways Europeans and Americans came to see what is "normal" and what is "exceptional" in contexts from gas laws to human variation. While this book was gestating, Ted was also a member of the group of younger scholars who held fellowships at Bielefeld University in Germany that produced the influential collaboration The Empire of Chance: How Probability Changed Science and Everyday Life (Spektrum, 1989; Cambridge, 1990).

Having established with The Rise of Statistical Thinking that and how statistical thinking emerged as a distinctive epistemology during the 19th century, Ted's next book, Trust in Numbers: The Pursuit of Objectivity in Science and Public Life asked why it did, and what this development tells us about the cultural and political values in the Western societies. The argument Ted made was in many ways counterintuitive: it was precisely because the empirical claims of 19th century engineers and bureaucrats were weak or contested that quantification was elevated as a source of epistemic authority to resolve debates and disagreements involving "subjective" opinions. As he had with his first book, Ted illustrated Trust in Numbers with a series of beautifully-chosen case studies from diverse areas of bureaucratic statistics: political economy, accountancy and actuarial practice, civil engineering, and more. At publication the book was received as a brilliant intervention in the historiography and philosophy of quantification, and has only gained stature with time. It is still regularly assigned in introductory graduate seminars in history of science and STS, and perhaps more importantly has been widely read outside of our field by historians, sociologists, philosophers, political scientists, and other scholars of quantification and political organization. It is indeed a foundational book.

This is not to say, however, that Ted's two later books have been unimportant. Indeed, Ted's most recent book, Genetics in the Madhouse: The Unknown History of Human Heredity (Princeton, 2018), earned him the 2018 Pfizer Prize, and his previous work Karl Pearson: The Scientific Life in a Statistical Age (Princeton, 2004) is regarded as a model of scientific biography attentive to both intellectual and social nuance. In fact, in some ways Genetics in the Madhouse is Ted's most important book, because it closes the loop between the bureaucratic practices of statistics documented in his early work, the development of quantitative biological science (heredity and eventually genetics), and epistemologies of ordering and control that "statistical thinking" engendered and elevated during the 19th and early 20th centuries. The book also makes a novel argument about the origins of human genetics and the human sciences more broadly in those very statistical practices and epistemology. Implicitly, it helps us see how a way of ordering and understanding the world-counting, tabulating, taking averages, etc.-was foundational for social and biological interventions (public asylums, the labeling of people, the reduction of complex behavioral traits to simple hereditary factors) that have implicated concepts and methods of science in social systems of inequality that extend to the present. Seeing the world "as data," in other words, had consequences that went far beyond merely providing a conceptual and methodological framework for studying economic, demographic, or taxonomic trends. Data are political, and in a sense Genetics in the Madhouse is a powerful confirmation of Ian Hacking's insights in his influential 1985 essay "Making Up People."

Ted is not just an enormously prolific author—as of 2018 his CV lists over 100 articles, chapters, and essays, along with four single-authored books and two edited or coauthored volumes—but has also contributed tremendously to the profession and to our society in both formal and informal ways. His collaborative spirit has led to visiting appointments at a wide variety of institutes and universities in Europe and North America, where he has been a key instigator of conferences, workshops, working groups, and collaborative publications. Ted has been extremely generous towards younger scholars, and beyond the dozen-plus PhD students he has formally supervised (as of 2018) he has been an outside reader, informal mentor, and cheerful source of encouragement to a great many others (including the author of this nomination letter!). He is renowned for his generosity, constructiveness, and dry wit—he is a favorite colleague of the many dozens of scholars with whom he has interacted during his career.

Ted has also been very active in supporting the activities of the HSS and the profession at large. He has served two terms on the HSS Council (1991-1993; 2005-2007), has served as Program Chair for the 1992 and 2008 annual meetings of the HSS, and served on a variety of HSS committees (nominating, meetings and programs, publications, research and the profession). In addition to standard manuscript/grant refereeing, Ted has served on advisory editorial boards of more than a dozen journals or book series (including Isis), and he has served the public interest as a member of panels or review boards for the SSRC, the Human Genome Initiative, the UN Development Program, and other initiatives.

It goes without saying that Ted has been widely honored throughout his career, with fellowships and awards from some of our profession's most prestigious institutions and agencies. He has held multiple Scholar's Awards from the National Science foundation, a Guggenheim Fellowship, the Ludwig Fleck Prize, and is an elected member of the American Academy of Arts and Sciences. He has also held residential fellowships at the Max Planck Institute for the History of Science, the Ecole des Hautes Etudes en Sciences Sociales, the University of California Society of Fellows, and the Wissenschaftskolleg zu Berlin, among many others. He has been a distinguished or keynote lecturer at dozens of meetings and events (including the Distinguished Lecture of the HSS in 2007), and has presented his work at workshops, conferences, and departmental colloquia at institutions around the world.

The Sarton Medal is a fitting recognition of Ted's outstanding achievements in the field and his influence on generations of scholars.

Join us in congratulating Ted at the 2023 HSS Annual Meeting in Portland OR, during the Prize Ceremony and the closing plenary: Sarton Medalist Interview: A Conversation with Ted Porter.

