A Tribute To Robert K. Merton On Receiving The National Medal Of Science

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Last April 28, I had the pleasure of hearing my good friend Robert Merton, the eminent sociologist and historian of science, deliver the American Council of Learned Societies' 1994 Haskins Lecture. The talk, presented at the American Philosophical Society in Philadelphia, centered on Bob's "life of learning"-- the subject addressed each year by a notable "humanist" invited by ACLS to deliver the prestigious lecture.

As Bob spoke about his boyhood in Philadelphia, his coming of age as a young Harvard intellectual, and the factors that fueled his preoccupation with the history of science and the behavior of scientists, I was touched by a variety of emotions. As often during the 30 years or so that I've known him, I was fascinated by his capacious intellect and his knack for originating concepts and expressing them in clear, evocative terms. (Whether writing or speaking, he knows how to hold his audience.) I was also proud, since he has worked closely with me as mentor, colleague, and coauthor. I must confess as well to a certain amount of civic pride, since The Scientist--like Bob Merton--has its roots in the City of Brotherly Love.

ACLS couldn't have made a more appropriate selection for the 1994 Haskins lectureship. That was also my reaction to the recent news that Bob was among the eight individuals selected by President Clinton to receive the 1994 National Medal of Science. As we reported in our coverage of the event (N. Sankaran, "Eight To Receive National Medals Of Science," The Scientist, Oct. 3, 1994, page 1), he is the first sociologist to be so honored. Evidently, I am not alone in holding my good friend in high regard. Indeed, as I listened to his lecture, the thought ran through my mind that, if there were a Nobel Prize category for the sociology of science, Bob Merton would have to be a recipient. I am pleased by the honors this Nobel-class thinker is receiving, as international community the of historians and sociologists of science must also be--not that there has been a dearth of recognition of this great mentor, now in the 85th year of an incredibly productive life.

His record is indeed impressive. His masterpiece of theoretical sociology, Social Theory and Social Structure (New York, The Free Press, 1949; enlarged editions, 1957, 1968) has gone through 30 printings and ranks among the most cited books in the social sciences. Two other seminal works, The Sociology of Science: Theoretical and Empirical Investigations (University of Chicago Press, 1973) and On the Shoulders of Giants: Α Shandean Postscript (University of Chicago Press, 3d ed.,

1993), should be, in my opinion, required reading for all scientists.

While treating matters of serious consequence. Bob Merton maintains a sense of irony, self-deprecating humor, and a fondness for wordplay that has seasoned and humanized his writings. In a recent note to me, he commented on a closeto-hand example of а phenomenon he first described in an article titled "The Matthew effect in science: the reward and communication systems of science" (Science, 159:56-63, 1968). His neologism, "the Matthew effect"--named after a passage in the Gospel of St. Matthew--holds that patterns of biased peer recognition of authors of collaborative papers are often "skewed in favor of the more established scientist."

And so it is, he wryly observed, that papers written jointly by him and his colleague, companion, and wife, sociologist Harriet Zuckerman--now vice president of the Mellon Foundation--were often mis-cited as having been written by "Merton and Zuckerman"-even though, as he noted, "Harriet is explicitly designated as the first author." He went on: "It is ironic, of course, inasmuch as I am here the dubious 'beneficiary' of the Matthew effect"--a phenomenon that he had identified, named, and harshly criticized.

The conceptual impact of the Merton oeuvre has been vast; however, while he has profoundly influenced many aspects of 20th-century science, or at least our ways of thinking about it, the influence has not been confined to the scientific realm. Such Merton concepts as "the self-fulfilling prophecy" and such Merton innovations as "the focused interview" have found their way into our everyday lives. And many of his concerning visionary notions the clockworks of human behavior, while often pertaining originally to the world of research, have been extended in application to matters of family, business, and religion.

I congratulate my old friend Bob Merton on receiving the National Medal of Science. And I encourage young scientists who have not yet studied with this master to get to the library or bookstore as soon as possible. A valuable treat is in store for you.