LAUDATIO ROBERT K. MERTON

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The acceptance of the First Sarton Chair by Prof. Robert K. Merton, who is well-known to us, both for his close association with George Sarton, be it as an Unruly Apprentice, and in his own right, guarantees that the Sarton Chair will develop into a real catalyst for research into the history of science, science of science, and the philosophy of science.

A catalyst in the same way in which Sarton's journal *ISIS* was hopefully begun, and ultimately succeeded in being, "... at once the philosophical journal of the scientist, the scientific journal of the historian, and the sociological journal of the sociologist", a goal George Sarton set himself.

With the establishment of the Sarton Chair and Prof. Merton's acceptance as first holder, we also profess Sartonian ambitions, knowing that even if we realize only one percent of Sarton's achievements, we shall have done a marvellous job.

It is true that the Sarton Committee, as they focussed on the work and the personality of the man himself, became more and more enthusiastic and so did they develop several initiatives which will intend to further Sarton's ideals and scientific work. And although we shall not dwell on them, here we are confident the initiatives will attain substance and grow within the community of Ghent, providing recognition of Sarton, his work, ideals and targets.

But let us return to the present initiative and to Prof. Merton, who honours it by his acceptance of the Chair. Prof. Merton is a well-known sociologist, and we think that many of you present here were attracted by his renown in this field. However, it is not the sociologist in Merton we are honouring today. I must hasten to add "the sociologist among others", for as George Sarton contained a plurality of dimensions in his person, we are

greatly pleased that the first holder of this Chair is in the same way a person of richly-facetted intellect and achievement, who will set high standards for those who follow. Hopefully a long line of brilliant scientists and true humanists. Somewhat to illustrate the profundity with which Prof. Merton has treated his multi-pursuits, let us first, only briefly, dwell again on the person George Sarton. This in order to enlighten Merton's personality in that spirit in which he and Sarton both stood "on the shoulders of giants", an expression and perspective so dear to Sarton and Merton.

In his work, in his own writings and in the many biographical pieces written by others, George Sarton appears clearly as a humanist. A humanist convinced that knowledge stands central to the individual's, to mankind's endeavours towards progress. Knowledge in all its variety and forms must be stimulated. Sarton inevitably became therefore truly interdisciplinarily motivated, not someone to whom interdisciplinarity meant the dissolution of science into a plurality of unconnected disciplines. On the contrary, he believed that interaction, even symbiosis of the sciences, and their synthesis in general would play a crucial role in progress. He also gave much attention to education and its relevance to the progress of mankind. He was a person who felt that the study of genesis and development would throw genuine light on the phenomena and the processes of the systems to be understood.

At the same time Sarton believed that all this richness, this large vision, did not encompass a strong methodology. The larger your scope, he felt, the more danger of losing your way, and therefore stronger methods are needed. It was this characteristic, the ability to "exact" method, which, in harness to the wealth of abilities in this man of large personality, lifted him far above so many of his contemporaries, many with like aspirations, and made him the founding father of the history of science.

We will not dwell extensively on all the features of George Sarton, they have been described and analysed by many authors. What I want to do here is to evince the richness to be found in the work of Robert Merton, with Sarton in the background.

Perhaps partly under the influence of Sarton, we find in Merton the same deep interest in knowledge and its impact on mankind, the same commitment to the history of science. But the priorities are different. Sarton saw the study of the history of science as a means for constructing a better world for a better mankind. The study of the medieval science he saw as a means for better understanding the history of science. And still further he retreated to obtain a sufficiently long run. In fact, he saw the study of arabic science as a means of understanding medieval science and he has devoted much of his time and considerable powers to it.

Merton made another approach and other choices. His choices of study have benefitted also all of us, students of mankind that we are. Although the sociologist was ever-present in his writings, he has made marvellous contributions to the history of science. Think of, among others, his dissertation "Science, Technology and Society in Seventeenth-Century England". We find even in his early scholarship an interdisciplinarity (an attempt to see the interrelations of disciplines), a struggle for synthesis, notwithstanding, or perhaps made possible just by, the use of analysis and empirical research.

In the same Sartonian tradition, we can situate Merton's attention to education and teaching in particular. Although here again, Merton was an original, rather than imitating the style of the master in realizing his objective. Robert Merton has been highly creative and constructive in his own right. To illustrate this, we shall quote some of his statements which give his views on teaching:

"Teaching is a kind of creation, that is, something new is occurring while you do it".

"The effort to think a problem through carefully in advance of a lecture is often capped by the spontaneous emergence of new ideas about the problem in the course of presenting the lecture. That has been the peak experience in teaching. It has been a source of pleasure; even more, of joy."

"Lectures constitute the major form of 'oral publication' in which ideas are developed tentatively. Those ideas that do survive critical examination are then ready for publication in print."

And so we can go on. But even these quotations illustrate how the master Merton, on the shoulders of Sarton, was bewitched, fascinated by the genetic dimension of knowledge. In several tones, in several shades, he is addressing the psycho-social dimension of the origin and development of knowledge.

We shall do injustice to Prof. Merton if we do not mention the strength of his empirical methodology, always used in his work, and in which, again in the footsteps of Sarton, he found his own way and personal contributions.

To end I shall quote from a Sarton letter (1935) to Henry James, novelist and son of the psychologist and philosopher, explaining his own work:

"...our intellectual elite is divided into two hostile groups we may call the literary group and the scientific one: members of the first group are not interested in science or know too little of it to study its history; scientists are not historically minded (and many of them are not even educated). That is a vicious circle which we must break. The only bridge between these two groups is provided by our studies..."

In honesty, we dare to say that Prof. Merton's work is certainly embraced by Sarton's words 'our studies', however unruly an apprentice he may have been.

I think that it is certainly justified to mention and to congratulate also Prof. Zuckerman, who has so long collaborated with and stimulated Prof. Merton in his work.

Thank you.

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