CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES

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Dear Professor Mosteller,

This letter is written in response to yours of 10 February on behalf of the <u>Science</u> search committee, inquiring about my interest in the science policy arena.

The nature of my interest can best be understood in terms of the patterns of my career. My initial training in the United Kingdom was in mathematics, physics, and chemistry, and culminated in work in synthetic organic chemistry with A. R. Battersby. Though he and others encouraged me toward a career in research, it was already clear to me in my early twenties that I did not aspire to original creative work within the sciences but instead was interested in understanding science itself as a creative form.

In 1960, in the United Kingdom, this interest was easier to express than to satisfy. I therefore spent a period working in chemical industry in process development, to broaden my experience while clarifying my options. The slow emergence of organized work in the history of science at Cambridge University provided me with the opportunity I sought, and Churchill College (where I was first a student, then a fellow) provided a natural milieu within which to think about science in the broadest cultural terms while rubbing shoulders with such individuals as Francis Crick and Murray Gellman.

The history of science is of course a much more developed subject in the United States than it is in England, and a year as a visitor at Harvard provided the natural transition to my American career. Within that career, history of science and science policy have been my two loves while a steadily growing experience in editorial and administrative affairs has balanced my intellectual work.

History is a policy science, in the sense that reflection on and analysis of our experience is one necessary element in any discussion of options, issues, and future possibilities. This belief shaped my creation of the Department of the History and Sociology of Science at the University of Pennsylvania, in 1970. Equally, this belief may be seen Professor Frederick Mosteller February 17, 1984 Page two

reflected in such early "policy" papers as my 1971 address to the annual meeting of the National Research Council (Published in <u>Science 173</u> 27-31), or such recent work as the chapter I contributed to <u>University-Industry Relationships: Selected Studies</u> issued by the National Science Board as its 14th Report to the President (Washington, GPO, 1983). This same concern with policy has informed my work on science indicators, over the past decade--first as conference organizer, then as co-editor of <u>Toward a Metric of Science</u> (with Joshua Lederberg, Robert K. Merton and Harriet Zuckerman) and as a continuing member of the SSRC Committee on Science Indicators, and finally as keynote speaker at the annual meeting of the SSRC this coming June, when SSRC seeks to reassess and expand its interest in the science policy area (my subject will be "The Politics of Scientific Knowledge").

A different facet of my concern with science policy may be seen in my role as a member of the organizing committee of the Society for Social Studies of Science (4S) in 1975. Since that time I have served continuously as member of the 4S Council, and as Chairman of its publication committee. While President of 4S (1982-83), I worked to ensure that the Society provide a forum in which scientists and policy makers could exchange ideas with historians, philosophers, sociologists, and economists. In 1982, I was chairman of the organizing committee for a three day meeting in Philadelphia which drew over 1,000 participants from four different societies and which had science policy as one of its main motifs.

As these remarks indicate, my approach to policy has been within a context of concern for science as a creative force, and historical knowledge as a primary tool to use. Because history is a flexible tool, and policy is a wide arena, it is not easy to set sharp limits on my present or possible interests. But, by way of present example, I serve on the Advisory Committee to the Policy Research and Analysis Program at NSF; next month, I shall be one of four speakers (along with William D. Carey) in NSF's new roundtable series for NSF senior executives; and as George Sarton Memorial Lecturer before the AAAS in New York in May, I shall speak on "The Historian's Calling in the Age of Science." These addresses will have much to do with science policy, both implicitly and explicitly. Again, I should note that I have recently accepted an invitation to write a history of the Center for Advanced Study in the Behavioral Sciences, in part because of my desire to understand the patterns and policies that have shaped one important facet of science since World War II (and an invitation from the Twentieth Century Fund to write a more general history of science policy since World War II is on my desk).

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In these remarks I have not considered how a policy motif is implicit in the work of the Center for History of Chemistry, which I direct. Nor have I taken up that theme in relation to <u>Isis</u>, the History of Science Society, and my work as an editor and a publisher. No more have I turned to the substance of science policy. But this letter is long enough, and I will be pleased to supply more information if you wish. Also, I should note that William O. Baker, Gerald Holton, Joshua Lederberg, Gardner Lindzey, or Robert K. Merton may be able to offer useful further commentary should you so desire.

Yours sincerely,

And

Arnold Thackray Fellow

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