recent trends in the history of science and technology in which these two approaches are increasingly merged, the authors emphasized the external and internal factors that impinge upon scientists and engineers. The recommendations offered in the volume were specifically formulated to support the collection of documentation that will enable a diverse group of historical researchers to ask a broad range of questions about the scientific and technological process.

Helen W. Samuels Joan Krizack Barbara T. Simmons Massachusetts Institute of Technology Cambridge, Massachusetts

## The Reviewer Responds

Thank you for this opportunity to reply to Helen Samuels' comments on my review of Appraising the Records of Modern Science and Technology.

First, I am inclined to suggest that suspending introduction of a "main point" until page 23 of a publication that is only ninety-six pages long gives as much point to my criticism as to her complaint. Second, the authors do mention professional societies. The section on "Communicating and Disseminating Findings/Issuing Technical Reports" explains that scientists confer and communicate with colleagues, give papers at professional conferences, and submit articles to appropriate journals in their respective fields. Yet nowhere in this section is there any intimation that the records of scientific journals and professional societies might themselves be worth acquiring. Instead, the authors focus on the records created by the individual scientist — his drafts, his articles, his papers, his technical reports. (Incidentally, the authors fail to mention that published articles and other items may more properly belong in the domain of the librarian than that of the archivist. Nor do they address the issue of "gray literature," a looming problem for both archivists and librarians.) Third, the section on funding is plagued by a similarly narrow focus. True, we learn that scientists sometimes rely on internal and external financial assistance to underwrite research projects and other work; but, again, their remarks and comments are largely confined to the contents of the scientist's personal grant application file. Any suggestion that the records of the granting agency ought to be acquired — and I am not merely referring to case files here — must be inferred. Fourth, this publication also gives short shrift to the records of scientific agencies, especially public and para-public institutions, whose primary role is not to provide funding or to undertake research but to make science policy and to conduct studies into the role that science ought to play in the making of social and economic policy. In other words, there are records which document policy for science and records which document policy through science. In the section on "Establishing Research Priorities," for example, there is nothing beyond a barely discernible nod in the direction of information obtainable — not records available — from agencies such as the National Academy of Science. As before, too much is left for the reader to guess at.

One is left with the impression, then, that the external influences are interesting merely as points of origination for records that ultimately come to rest in the files of individual scientists and as useful sources for the reconstitution of the efforts of the individual scientists. This may have been unconscious or unintentional, but the heroic individual seems to receive undue prominence in this publication's view of the universe of science records.

As for Mrs. Samuels' remark about my "eagerness" to impress, this was unfair and gratuitous. When asked to review a book, I take the view that I have a responsibility to its prospective readers. My digression on the debate between "internalists" and "externalists" was made necessary, I felt, by the authors' failure to introduce their readers—not all of whom will be science archivists—to the issues being debated among historians and sociologists of science. Instead, it seems they are left to float around in a vacuum without any fixed conception of the implications of appraisal choices. In fact, my point that their publication chose to focus on one particular body of records was of secondary importance; of more concern to me was their inattention to the intellectual implications that inevitably accompany archivists' decisions to acquire or ignore certain bodies of science records (or any other kinds of records, for that matter).

The present circumstances have compelled me to dwell on what I consider to be the limitations of this publication. Lest Archivaria's readers be misled, however, I hasten to remind those who have read the review, and to point out to those who have not, that I found Appraising the Records of Modern Science and Technology to be an interesting and informative guide; it deserves a prominent place on the bookshelves of archivists dealing with scientific records. My criticisms were intended to show the conceptual limits of a substantially successful piece of work and to suggest other directions which future guides to archival appraisal ought to take. It was not my intention to belittle their worthy contribution.

**Brien Brothman** National Archives of Canada