

Sam 283

Contemporary Classics
in Science

Contemporary Classics in the Life Sciences

Volume 1:
Cell Biology

Edited by
James T. Barrett

With a Foreword by
Joshua Lederberg

Preface by
Eugene Garfield

ISI PRESS

Philadelphia

186

Foreword

The interest shown by authors and readers in these vignettes is an evident response to a gap in contemporary scientific communication: that of personal historical reflection. However debatable the criterion of citations as a measure of intellectual value, they do speak to the intertextual continuity of scientific and methodological effort. Doubtless some uncited, even unpublished, productions are equally worthy of such reflection; their collection awaits new invention of how to unearth such cryptic gems. Meanwhile citation statistics, coupled with the good judgment of authors and editors, have helped in the selection of a panorama of discovery reminiscences unparalleled in compilations of the contemporary history of science.

ISI's instructions to authors account for the emphasis placed on certain themes: the inspiration of the work, the obstacles to its publication and acceptance, the most recent work by the author or a disciple elaborating on the same work. The multifarious glimpses of how so many scientists have perceived acts of discovery in day-to-day science, or more precisely put, how they tell the story today, are raw material for abundant reflection on the actual mechanism of science. It is especially rich on such sociological and psychological issues as academic organization, risk taking, the gatekeeping functions of journal publication, resistance to innovation, priority and credit. Between the lines, and sometimes in them, are many of the ambivalences and stresses adumbrated for the scientific career.^{1,2} Some exhibit the tension between imagination and criticism, between the creation and destruction of worlds, that characterizes the most trenchant of intellectual and artistic advances.

The pieces are too brief to give more than hints of the internal technical history of the science itself, but these are also abundant. Especially interesting are the authors' own reflections on the fruition and elaboration of their earlier work, and their citations to current sources on the same subjects.

As useful as these vignettes are, especially as starting points for further inquiry, the collection has certain intrinsic limitations as serious history of science. The constraints include those that must be associated with any form

of biography, especially autobiography.^{3,4,5} The most meticulous of self-chronicles are tainted with the conflicting interests of authors likely to be over-involved with their biographical subject. The commentaries are casual productions, limited in space and documentation, and subjected to a bare minimum of editorial scrutiny. They are fascinating documents in themselves; they are an opening, not a final word. With the best of intentions, personal recollections may be fraught with conflation of timing and of motive. These are notoriously unreliable with respect to attributions of internal mental processes.^{6,7} The commentaries should not bear an unwonted burden of being regarded as finished critical studies; they are valuable enough as vernacular, intimate statements of transparent face validity.

Still lacking in existing organs of scientific communication is any relaxed channel for the extended discussion of historical controversy. Anguish about misplaced priority of discovery⁸ is fiercely felt, but mutedly published. Many authors of scientific articles may cite relevant prior work in the most patchy way—they do not always regard themselves as intellectual historians—and there is no place to repair the deficit without turning it into a federal case. There is no usable medium today to continue discussions of “what may really have happened” beyond “Contemporary Classics.” Lacking such a critical forum, our authors may feel liberated to express their feelings more authentically than they have under the gauntlet of customary peer criticism; and we should be grateful that they have had that opportunity. Conversely, each article stands outside the discipline, characteristic of science, of public critical discourse. Whether an extended forum can be built without stifling easy self-expression is a challenge to architects of our communication system in science.

Meanwhile, there is much to savour and more to ponder in the menu before us.

Joshua Lederberg
Rockefeller University

REFERENCES

1. Merton R K. *Sociological ambivalence*. New York: Free Press, 1976.
2. Eiduson B T & Beckman L, eds. *Science as a career choice*. New York: Russell Sage Foundation, 1973.
3. Runyan W M. *Life histories and psychobiography*. Oxford: Oxford University Press, 1982.
4. Zuckerman H A & Lederberg J. From schizomycetes to bacterial sexuality: a case study of discontinuity in science. (Unpublished ms.), 1978.
5. Woolgar S W. Writing an intellectual history of scientific development. The use of discovery accounts. *Soc. Stud. Sci.* 6:395-422, 1976.

6. Zimmerman D R. *Rh: the intimate history of a disease and its conquest*. New York: Macmillan, 1973.
7. Nisbett R E & Wilson T D. Telling more than we know: verbal reports on mental processes. *Psychol. Rev.* 84:231-59, 1977.
8. Merton R K. Priorities in scientific discovery. *Am. Soc. Rev.* 22:635-59, 1957 (reprinted in: Merton R K. *The sociology of science*. Chicago: University of Chicago Press, 1973. p. 286-324).