FOCUS: BIOGRAPHY IN THE HISTORY OF SCIENCE

Introduction: Fragmented Lives

By Joan L. Richards*

ABSTRACT

Sophia De Morgan's *Memoir of Augustus De Morgan* highlights the difficulty of creating a unified picture of a scientific life. It also provides a critical perspective from which to view the chronological development of the modern "scientist" from the eighteenth through the twentieth centuries.

AN ANONYMOUS LATE NINETEENTH-CENTURY REVIEWER of Sophia De Morgan's *Memoir of Augustus De Morgan* (1882) began reading the book with high hopes. In 1828 Augustus De Morgan was appointed the first Professor of Mathematics at University College London, which meant he was among the first people in England to support himself and his family through a life of specialized teaching, research, and writing. At the time there were few role models for his position, and De Morgan's life was the product of vigorous self-fashioning. Upon his death, the image this reviewer had gleaned from hearsay was somewhat like a cubist painting, a rather disjointed picture of "a high mathematician," a "clear and vivid and inspiring" lecturer, and a "very amusing" man. The reviewer eagerly combed Sophia's book for insights into the presumably unified person behind these brief descriptive phrases: "the widow of a man has the chance of writing the best book about him," he enthused. But at the end of his read the reviewer sadly realized that Sophia had neither explained Augustus's mathematics nor shared tales from his classroom and that whatever "anecdotes of [her husband]" she might have "in store" were going to remain "locked in sacred memory."[1] He was too polite to say it outright, but clearly he thought Sophia's attempt to write Augustus's biography was a failure.

Sophia's disappointed reviewer can be seen as confronting an essential problem with

* Department of History, 142 Angell Street, Box N, Brown University, Providence, Rhode Island 02912.

[1] Sophia De Morgan, *Memoir of Augustus De Morgan* (London: Longmans, Green, 1882); and *St. James Gazette,* 23 Nov. 1882, p. 7. I first encountered the image of biography as cubist painting in James Clifford, "'Hanging Up Looking Glasses at Odd Corners': Ethnobiographical Prospects," in *Studies in Biography,* ed. Daniel Aaron (Cambridge, Mass.: Harvard Univ. Press, 1978), pp. 41–56.

Isis, 2006, 97:302–305

0021-1753/2006/9702-0004$10.00

any biography—the ultimate impossibility of bringing another person to life—but the problem was exacerbated in the case of De Morgan. Key to the lifestyle Augustus had defined for himself at University College London were a number of sharp separations that severely challenged Sophia's efforts to create narrative unity from his life. The compartmentalizing process was seen most obviously in the university, where Augustus fiercely defended the separation of religion from public life. At home, his position was bolstered by "man-like and masterful views of women's powers and privileges" that kept Sophia and their seven children sequestered from the rest of his life. Closely connected to these separations was the specialization that kept his work opaque to all but a highly educated few and meant that, both with his family and in more general society, "he seldom entered into any serious discussion." In De Morgan's lifetime these separations allowed him to pursue his work in peace, but after his death they seriously hampered Sophia's attempts to create a unified picture of the man she had loved and lived with for more than thirty years. She could not write about his work because she did not understand it, and she would not describe his life at home because "he never liked making known what nearly concerned his family."[2] Both in what it contains and in what it does not, Sophia's *Memoir* stands as a statement about the way a life in science should relate to the wider world of men and women, families, and professional colleagues. That Sophia did not create a unified portrait of Augustus may thus be read not as a failure but, rather, as a challenge to her reviewer's conception of what is involved in a scientific life.

Sophia's *Memoir* may also be a frustration for more modern readers. This is not a surprise; Sophia's *Memoir,* like all scientific biographies, is just a snapshot taken from a particular vantage point in a much larger historical vista of ever-changing science and lives within it. All scientific biographers must locate their subjects in a complex landscape of developments in forms of argument, structures of institutions, and definitions of science. In addition, ever-shifting understandings of the scientific life may be reified in layers of past decisions. Sophia censored her book and her materials to conform to her and Augustus's views of the public and private. Her choices may be based on a long-gone view about what is significant in a scientific life, but they are irrevocable and will forever shape what we know about Augustus. The same is true for all historical figures whom we know only through the materials they, or their associates, chose to keep or discard. For all of these reasons, biographies written about eighteenth-century subjects will be essentially different from those focused on the twentieth century.

One obvious symptom of these changes in views of lives in science can be seen in the terminology the essayists in this Focus section use to describe their biographical foci. Mary Terrall's biography of Pierre-Louis Moreau de Maupertuis is a study of "self-fashioning" in a world of "shifting ground," when science was "becoming integrated into commercial ventures, government projects, and long-distance exploration, as well as entertainment and private edification." She focused her attention on the ways "he constructed a life in science," made "a name for himself as an enlightened man of science." Even as she did so, Terrall recognized that not only the subject but the structure of her study is essentially an eighteenth-century one; she recognizes that the "man of science" Maupertuis was trying to become is a historically contingent persona that "arguably . . . did not exist as such before the eighteenth century."

It is also a persona that did not survive long: in the nineteenth- and twentieth-century

[2] S. De Morgan, *Memoir of Augustus De Morgan,* pp. 94, 400.

worlds of Ted Porter's and Mary Jo Nye's essays the "man of science" has given way to the "scientist." The term was first suggested in 1833, but it did not catch on immediately.[3] In her 1882 *Memoir* Sophia De Morgan took the trouble to explain that her husband's mathematical and logical interests deserved the name of "science," but she nowhere uses the word "scientist" to describe him.[4] A quick survey of assorted contemporary responses to her portrayal finds that no one else did either; De Morgan's determined self-fashioning earned him descriptions as "crotchety," "perverse," "touched with eccentricity," "strong-souled," and displaying "singular independence of character," but nowhere as a "scientist."[5] Only a decade later, however, Porter's subject, Karl Pearson, was vitally "concerned with the public role of the scientist."

The more than fifty years of passive resistance to the word "scientist" attest to the significance of this linguistic change, and much of Porter's interest in Pearson may be seen as grounded in an attempt critically to reconsider its implications. In the first third of his essay, Porter pushes back against the changes that supported use of the term by insisting that the "island view of science" in which it is rooted was neither inevitable nor necessary. Porter's Pearson may have been a scientist, but he saw his life as a *Bildungsroman,* not as a cubist painting, and Porter's stated goal in writing biography is to bridge the gaps that define the modern scientist and thereby to "recapture some of the ways that scientists found meaning in the world and attached moral value to their work." However, even as Porter honors Pearson's "attempt to assert the wholeness and integrity of his life" he recognizes that the effort was "desperate," that whatever his view of himself Pearson "often appeared in his own time, and still more so to history, as a missionary for specialized, technical knowledge."

Porter describes Pearson's attempt to humanize the scientist as "tragic," and Mary Jo Nye's essay suggests that the same might be said of Porter's hopes of defending the view that "the scientist, as a human type, has a history that matters." The sheer variety of the ways she offers to understand the lives of scientists suggests the triumph of the cubist over the unified view, and efforts to defend unity—be they Porter's or Pearson's—seem skewered by the ease with which Nye asks the polarizing question, "Are the most popular scientific biographies, as a rule, books about the scientist or books about the science?" From her twentieth-century position, Nye sees the many facets of scientific lives as a given and as so distinct that they will not be accessible to any single audience. Faced with so many competing demands, the primary challenge for Nye's biographer lies in deciding which partial picture to develop for which audience.

These three essays may thus be rather neatly ordered as a chronological tale that moves from Terrall's "man of science," through Porter's Pearsonian angst, to Nye's openly fragmented "scientist." However, the case of De Morgan may serve as a reminder that the biographical focus on individuals will always trouble not only the broad sweep of institutional and cultural history but even that of etymology. De Morgan was as out of step in

[3] [William Whewell], "Mrs. Somerville on the Connexion of the Sciences," *Quarterly Review,* 1834, *51:*59. For the nineteenth-century fate of Whewell's neologism see Sydney Ross, "'Scientist': The Story of a Word," *Annals of Science,* 1962, *18:*65–85.

[4] In a footnote she carefully explains: "I have throughout this memoir used the word *science* in reference to Mathematics and Logic, and those branches of knowledge in which processes or reasoning are applied to subjects of observation. This is the older meaning of the word." S. De Morgan, *Memoir of Augustus De Morgan* (cit. n. 1), p. 117n.

[5] *Pall Mall Gazette,* 6 Nov. 1882, p. 5; *Knowledge,* 1 Dec. 1882, p. 435; *Spectator,* 11 Nov. 1882, p. 1446; "New Books" [from unknown periodical], 28 Dec. [1882]; and *Modern Review,* Jan. 1883, p. 136.

a world that had no word for isolated professional scientists as Pearson was in a world that honored them. What is more, Nye's biography of the twentieth-century scientist Patrick Blackett shows him to have "crafted" his scientific life as actively as Maupertuis "fashioned" his in the eighteenth century. Recognizing the significance of their subjects' individual lives is the special mission of scientific biographers. The greatest value of the biographies they write is that they return our focus to the place of human beings, with all their wonderful quirks and crankinesses, in the development of the great human enterprise that is science.