BOOK REVIEWS

Partnerships

Creative Couples in the Sciences. HELENA M. PYCIOR, NANCY G. SLACK, and PNINA G. ABIR-AM, Eds. Rutgers University Press, New Brunswick, NJ, 1996. xii, 369 pp. + plates. $50; paper, $18.95. Lives of Women in Science.

In standard accounts of the history of science, women scientists are hardly there. Few of us know even the names of such geniuses as Laura Bassi or Sophie Germaine or Mary Somerville, and although everyone has heard of Marie Curie, her two Nobels did not dispel the notion—despite all evidence to the contrary—that she couldn't have done it without a man. Over time, most women scientists have been written off by generations of historians who regarded women as incongruities to be ignored outright or otherwise explained away. In the past, such historiographic obtuseness helped retard women's education and their entrance into the scientific professions; it has also weakened the history of science as a whole. Women's studies is powerful not only because it rehabilitates forgotten women and their science but because it contributes to an expanded, more nuanced understanding of social institutions, scientific practice, the personal lives of scientists, and science itself.

In *Creative Couples in the Sciences* the editors focus on collaborative scientific marriages. The subject is a rich source for biographical studies of women in science, since marriage to a fellow scientist was often the best and sometimes the only way for a woman to work in science. Historically, however, "scientific marriage more frequently enhanced a woman's prospects for carrying on significant research than for securing credit for that research" (p. 8). It is essential, therefore, to go beyond the public record to private correspondence, memoirs, and other personal documents. The authors of the 17 essays in this volume have done just this. They present a remarkable variety of scientific lives, from the early 19th to the mid-20th century, in both North America and Europe, from the "hard" to the "soft" sciences. The marital styles vary widely. In some marriages, creativity and intimacy enhanced each other; some were egalitarian, others traditional; and a few ended in estrangement or divorce.

Representing the ultimate in successful collaboration, the three Nobelist couples were devoted spouses who were essentially equal as scientists. Aware that society would tend to view the wife as the subordinate and her contributions as derivative, Marie and Pierre Curie took care to cite and to some extent separately publish Marie's independent work. Their daughter Irène, armed with the Curie name and lifelong training, entered into a marriage with Frédéric Joliot that was scientifically egalitarian from the start. Carl and Gerty Cori were close collaborators all their adult lives, but their careers typified existing gender divisions: shortly after they emigrated to the United States, Carl was told that it was "un-American" for a man to work with his wife, and indeed "Mrs. Cori's" rank and pay remained well below that of "Professor Cori" until just before they were jointly awarded the 1947 Nobel Prize in Physiology or Medicine.

Several 19th-century couples exemplify the traditional roles of husband as scientist-instructor and wife as helper-student, but the women's contributions were often prodigious nevertheless. John Gould's career as an ornithologist was greatly aided by the superb illustrations of his wife, Elizabeth, who published over 650 lithographic plates, traveled with him to unexplored regions of Australia, and died in 1841, after 10 years of marriage and the birth of their fifth child.

Fifty years later, Anna Comstock began her career in a similar mode, as an illustrator for John Henry Comstock's entomology lectures and publications, but she eventually became a nationally known science educator and a full professor at Cornell. I was fascinated by this couple's experience with early coeducation in the United States, a highly egalitarian marriage (household tasks were shared or avoided), the development of entomology and nature-study at Cornell, and the "back-door" academic alternatives used by American women in the early 20th century, including teaching, rural education, public lecturing, and science writing.

There is more: zoologist couples; astronomers with varying patterns of collaboration; biologists and astronomers in 20th-century Canada; a pair of itinerant British mathematicians; the renowned British crystallographer Kathleen Lonsdale and her supportive husband, Thomas; social scientists Alva and Gunnar Myrdal, who consciously designed their marriage and even their house to meet the demands of family and work. In the failed marriages—particularly those of Albert Einstein and Mileva Marić and of Dora Black and Bertrand Russell—the collaborations were also stunted. Several of these essays are very romantic to read. Kate and T. S. Brandegee, for example, were pioneering botanists of the flora of California and Mexico; their honeymoon in 1889 was a 500-mile walk from San Diego to San Francisco, "collecting plants all the way." Other marriage-collaborations were tragic.

This is a valuable collection, well documented and highly readable. In some essays I would have liked more scientific detail, but perhaps that was not possible for a volume of this size. The editors' introduction is a well-honed, thorough analysis of the field; in an appendix they also provide a referenced list of additional couples and other cross-gender collaborators. *Creative Couples* enriches our understanding of the history of women in science, the nature of scientific collaborations, and the immense changes in women's lives over the past two centuries. It will undoubtedly serve as the basis for expanded biographies and a stimulus for further research.

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Genetic Complexities

Genomic Imprinting. Causes and Consequences. R. OHLSSON, K. HALL, and M. RITZEN, Eds. Cambridge University Press, New York, 1995. xvi, 374 pp., illus. $80 or £45.

Genomic Imprinting: Causes and Consequences is a collection modeled on 24 lectures presented at a 1994 symposium sponsored by the Nobel Foundation. The names of most of the contributors will be familiar to those who have followed the field, as will the subject matter of most of the papers. But this is unlikely to prevent the vast majority of readers from encountering a number of pleasant surprises. Côté's treatment of the possible effects of mitotic recombination on the maintenance or disruption of imprinting is both novel and thought provoking. The chapters by Wolffe and by Singh and James will give many readers pause as they are offered an in-depth look at the potential