

That collapse is twofold. In science—specifically physics—the mechanical explanations of Isaac Newton and Hermann von Helmholtz are being overtaken by new mathematical abstractions (particularly those of Albert Einstein and Max Planck) which threaten Jakob's classical "world picture." The new science appears to undermine the intellectual confidence of the traditional physicist, and even to challenge his authority "right here in his sanctuary, the German university!"

The impending defeat of Germany in the "Great War" and the sacrifice of a generation of young men for the Fatherland is Jakob's other nightmare. In his darkest moments, he wonders whether the idealism of his youth, founded on the tradition of Goethe and Bach, has not been superseded by the political culture of Kaiser Wilhelm's Germany. And though he supports that culture out of patriotism, he increasingly fears its pretentious, militaristic, and irrational tendencies. Jakob feels the loss of order, clarity, truth—and even faith in progress—as a personal tragedy too great to bear. In the end, on a hill overlooking his town and institute, he takes his own life.

As historical method, McCormmach's footnoted "composite" history has limitations. We are never quite sure, for example, whether the protagonist speaks for himself or for the author; we miss a sense of biographical three-dimensionality, as the professor delivers his lines in a moving stream of consciousness.

Still, these are technical matters. For students of German history and the German "spirit," the book dramatizes the tradition of scholarship which insisted on the relationship of morality, idealism, and an understanding of the physical universe. American readers accustomed to viewing the carnage of World War I as the price of defending freedom, individualism, and even "civilization" will now reflect more carefully on the intellectual position of the "other side." For accomplishing all this, McCormmach's book bears reading alongside Ernest Jünger's 1924 *Storm of Steel* and Erich Remarque's 1929 classic *All Quiet on the Western Front*.

—Roy MacLeod

BEYOND SEPARATE SPHERES
Intellectual Roots of Modern Feminism
 by Rosalind Rosenberg
 Yale, 1982
 288 pp. \$19.95

That many Americans consider feminism a recent movement (and an academically unpedigreed one at that) is but one reason to applaud the publication of this book. Focusing on American women who entered the new social science disciplines—psychology, sociology, and anthropology—in the late 19th and early 20th centuries, Rosenberg, a Columbia historian, depicts their efforts to overcome rigid, often highly moralistic notions of women's "proper" place in the world. Weaving anecdote and analysis, she shows how the women's experiences in academic and institutional set-

tings influenced the direction and content of their theoretical work.

Attending universities was itself no simple matter for women of the Gilded Age. In 1881, Marion Talbot, a recent graduate of Boston University, joined her reform-minded mother in founding the Association of Collegiate Alumnae (ACA). A major goal of the ACA was to repudiate Dr. Edward Clarke's *Sex in Education* (1873), which warned that women's "relatively underdeveloped brains" and fragile health could not withstand the rigors of an "education developed for men." An 1882 ACA survey of all 1,290 of its members found them quite as healthy as other American women.

Fortunately, not all male academics were so condescending as Dr. Clarke. Professors John Dewey, Franz Boas, and George Herbert Mead vigorously championed women's entry into universities and, furthermore, helped direct the women scientists into new areas of social research.

The women learned well from their mentors. They had to. Psychologists Helen Thompson Woolley and Leta Stetter Hollingworth, and sociologists Elsie Clews Parsons and Mary Coolidge were among the many female social scientists who discovered that their own chances for survival in the academic and professional worlds depended largely on discrediting theories about innate sexual differences. Woolley and Hollingworth demonstrated that intelligence was not a "secondary sex characteristic" and criticized such notions as the "maternal instinct." While the psychologists attacked the prevailing ideas about biological (or "natural") differences between the sexes, sociologists explained the role of cultural determinants. Building on the work of earlier women researchers, anthropologist Margaret Mead (with whom Rosenberg closes her survey of the major figures) went on in her extensive field work among primitive societies to amass evidence of the cultural relativity of sex roles.

Despite their iconoclasm, most female scholars remained thoroughly Victorian in their refusal to acknowledge that women's sexual drives could be as strong as men's, or even that sex could be enjoyed. But with the publication of such books as Mary Coolidge's *Why Women Are So* (1912), which cautiously argued for an "even distribution of sexual feeling," the groundwork for the modern "sexual revolution" was laid.

The greatest weakness of the early feminists, suggests Rosenberg, was their naive belief that "separate spheres" would disappear with growing recognition of the "arbitrariness of sexual classification." They did not understand that it would take a social revolution to translate their revolutionary intellectual insights into reality. Rosenberg does not foresee such a revolution until men assume more of those traditionally female roles—including child care and social welfare—still borne largely by women.

—Kathryn Kish Sklar