

MASSENGALE, JOHN D. AND RICHARD A. SWANSON, eds. *The History of Exercise and Sport Science*. Champaign, IL: Human Kinetics, 1997. Pp. xiv; 472. Photographs, charts, tables, and indices. \$49.00 U.S.; \$73.50 Canadian. Cloth.

Interest in the historical and sociological study of sport has increased dramatically during the last quarter century. There are now scores of books in which sport is the central topic. Broad-ranging works such as Peter Galton's *The Cultivation of Hatred: The Bourgeois Experience, Victoria to Freud* (1993) and Eugene Weber's *France: Fin de Siècle* (1986) devote several pages, if not chapters, to the topic. However, historical studies of the sciences that have evolved in connection with sport, athletics, and physical education are virtually non-existent. *The History of Exercise and Sport Science* is a welcome step toward expanding our horizons. In combination with Steve Bailey's *Science in the Service of Physical Education and Sport*, an historical work commissioned by the International Council of Sport Science and Physical Education (I.C.S.S.P.E.), we now have the basis for remedying this much-neglected subject.

The collection is a special project of the National Association for Physical Education in Higher Education (N.A.P.E.H.E.). It exists in part because of the perseverance of Rainer Martens, founder of Human Kinetics, the publishing house that has done much to advance the interests of physical education in the last three decades. According to editors John Massengale and Richard Swanson, the purpose of the book is to record, examine, and analyze, for the first time in depth, the historical development of subdisciplines within the field of Exercise and Sport Science (p. xiii). Eleven individuals were selected for their professional stature in specific research areas (e.g. biomechanics, sport sociology) and their dedication to the task of accurately recording, detailing, and explaining their subdisciplines (p. xiii). A brief introductory chapter provides a general framework presented under the conventional divisions: 1885-1920; 1920-1945; 1945-1994. By the mid-1980s, the centrifugal forces that would come close to rending asunder the field that was once almost universally known as physical education had been encapsulated in debates over how increasing specialization in various subdisciplinary areas (e.g., exercise physiology, sport psychology, and sport history) was leading to rampant fragmentation tendencies apparent in higher education more generally. (Perhaps the most perceptive observation was made by Shirl Hoffman, whom the editors cite, in the August 1981 *Journal of Physical Education, Recreation, and Dance* when he expressed dismay that the field increasingly was graduating exceptionally narrow people . . . who lack a scholar's understanding of how their [sub]discipline relates to the broader framework of physical education and academic life.) A short concluding chapter poses such questions as "Where are we?" and "What will the future be?" questions that continue to trouble many individuals associated with a field that to this day remains poorly understood by both outsiders and a number of its own practitioners. To date, no work exists that examines the evolution of American physical education within broad intellectual and/or institutional contexts.

The nine substantive chapters (and their authors) are *Sport Pedagogy* (Linda Bain); *Adaptive Physical Activity and Education* (Claudine Sherrill and Karen DePauw); *Sport Sociology* (George Sage); *Sport History* (Nancy Struna); *Philosophy of Sport?* (Scott Kretchmar); *Motor Behavior* (Jerry Thomas); *Sport and Exercise Psychology* (Diane Gill); *Biomechanics* (Jerry Wilkerson); and *Exercise Physiology* (Elsworth Buskirk and Charles Tipton). The emphasis is on the half century following World War II—decades during which the authors made significant contributions. These were also the decades of the greatest quantitative changes in research production. However, matters of considerable significance occurred in the period from 1885 to 1945; and these decades will need more attention if we wish to attain comprehensive understandings.

Following World War II, as the editors point out, a number of events resulted in reorienting an appreciable portion of the field of physical education toward more scientific undertakings. (Significantly, the term *scholarly* appeared much less frequently, leading some critics to contend that this signaled a disparagement of the contributions of individuals in the historical, philosophical, and even the sociological areas.) The editors cite former Harvard president James B. Conant's 1963 indictment of *graduate work in the field of physical education* and the influential 1964 paper *Physical Education: An Academic Discipline*, authored by Franklin M. Henry (Professor of Physical Education at the University of California), as catalysts for monumental changes in the way physical education scholars perceived the field and its future (p. 2). These two events were significant, indeed. However, *Science and Medicine of Exercise and Sports*, comprehensive work that helped set the stage for future developments in the psychological, cultural, historical, therapeutic, and physiological aspects of exercise and sports, had appeared in 1960; and as Charles Tipton points out in his contribution on post-World War II exercise physiology, discussions directed at improving graduate study in physical education had been underway since the 1950s (p. 408).

If the substantive chapters have somewhat more the flavor of reviews of research than of historical analysis, this should not be surprising. As many know, academics are prone to see the world through the orientations of their particular disciplines. (To paraphrase what one contributor related to me: *Now that I have completed my chapter, I have a lot more respect for what you historians do. I have never worked so hard in trying to bring together so many disparate, but important, threads.*) Readers who are concerned with events and individuals who have been important in the evolution of the various subdisciplines will enjoy *The History of Exercise and Sport Science*. Historians who are seeking to expand their understandings of sport, exercise and physical education—as well as the biomedical or psycho-sciences more broadly conceived—also will find the collection worth exploring. They must be prepared, however, to find events often detached from wider institutional, cultural, or ideological contexts. They also must be prepared to deal with the fact that they will come away with more questions than answers. Rather than characterizing this as a shortcoming, I consider it a challenge.

The chapters evoke scores of intriguing questions. What, we might ask, has been the role of the Boston Marathon in fostering or at least in serving as a vector for attempts to study athletic performance? Why was the turn-of-the-century interest in advancing the social, psychological, anthropological, and neuromuscular study of play, games and sports exemplified in G. Stanley Hall's Pedagogical Seminary (today's *Journal of Genetic Education*) reflected into other undertakings? What were the larger institutional forces that made it possible for Coleman Griffith to establish an Athletics Research Laboratory at the University of Illinois in 1925? Were there considerations other than financial constraints occasioned by the Depression that brought about its demise? What has been the role of the United States Olympic Committee or the I.O.C. in shaping research directions in various exercise and sport sciences? Why did a society of sports physicians emerge in Germany as early as 1912 while it was not until 1953/54 that such organizations were formed in Britain and the United States? Although John Hobermann's insightful *Mortal Engines: The Science of Performance and the Dehumanization of Sport* (1992) sheds considerable light on this and similar questions, much more study is needed, especially of Anglo-American events.

Today the history of the exercise and sport sciences stands at a juncture rather like that which characterized the history of medicine (and the biomedical sciences) four decades ago when most work still focused on great personages and discoveries. Stimulated by developments in cultural history, the new social history, and feminist studies, the emphasis now is on broader issues, populations, and events. As Andrew Wear observed in *Medicine in Society: Historical Essays* (1992): "The social history of medicine has come of age. It is now possible to see in some detail the way in which medicine has developed within society." W.F. Bynum's *Science and the Practice of Medicine in the Nineteenth Century* (1994), for example, brings together class, gender, status, and institutional control as it examines how laboratory research and clinical practice were shaped by different national traditions.

Sherrill and DePauw's informative chapter, "Adapted Physical Activity and Education," which includes considerable information on national and international organizations, publications, etc., evokes some of the same types of questions that Bynum has addressed. The findings in historian Margaret Rossiter's two volumes dealing with the vicissitudes that women scientists in America have faced might prompt the reader of *The History of Exercise and Sport* to ponder the continuing absence of women as leaders of exercise physiology—a subdiscipline that has had an appreciable number of female graduate students. These are but two of many intriguing topics for investigation that await the scholarly attention of readers of *The History of Exercise and Sport Science*—whether their primary interests are sport, higher education, gender, or science.

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