Perhaps the only note of disappointment that may be voiced concerns the title of the symposium. It may mislead prospective readers as it did this reviewer. A modern symposium on molecular bioenergetics cannot ignore energy-transducing mechanisms in mitochondria, chloroplasts, and bacteria without being challenged. Finally, more careful proofreading would have avoided printing errors, particularly the embarrassment of misspelling Meyerhof's name in the index. As a book containing stimulating articles in several important areas of biochemistry, this volume is highly recommended. The price is much too high for the size of the book.

EFRAIM RACKER
Division of Biological Sciences, Cornell University, Ithaca, New York

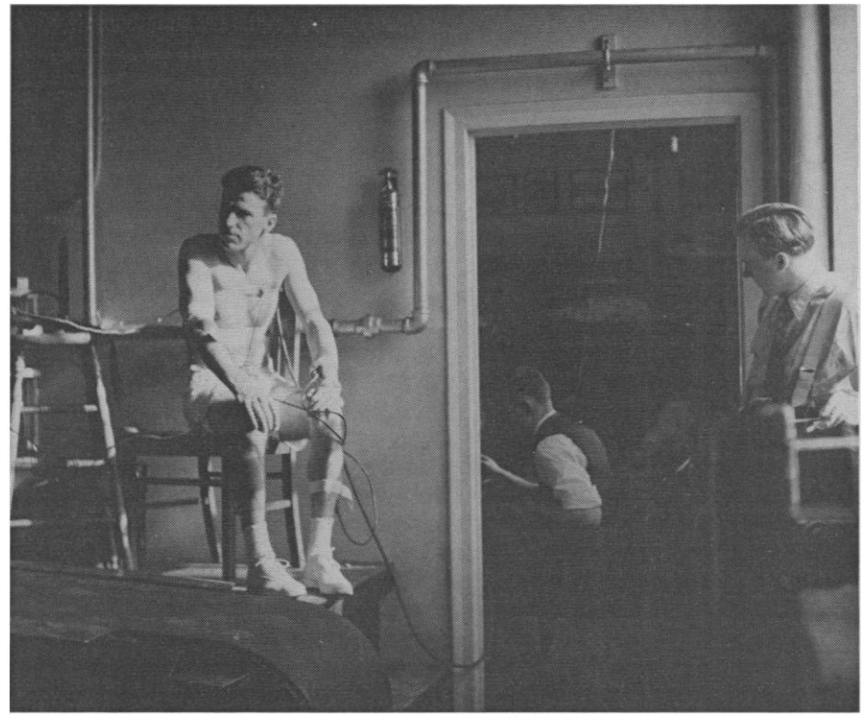
Henderson's Lab

The Harvard Fatigue Laboratory. Its History and Contributions. STEVEN M. HORVATH and ELIZABETH C. HORVATH. Prentice-Hall, Englewood Cliffs, N.J., 1973. x, 182 pp., illus. $9.95. International Research Monograph Series in Physical Education.

This book recounts the history of the Harvard Fatigue Laboratory, a remarkable organization that existed from 1927 to 1947. Although it grew (in association with the Harvard Business School), flourished, and then died over a quarter of a century ago, it has had far-reaching effects since then. Many of its scientists and trainees are busy operating somewhat comparable laboratories in many parts of the world.

The original name "Henderson's Lab" recalls a person well known to all medical students from the Henderson-Hasselbalch equation, though known to his contemporaries as "Pink Whiskers." Later the work was dominated by D. B. Dill, a "scientist's scientist" who was always experimenting on himself and anyone who could be corralled.

The laboratory was involved in applied physiology in various situations. The conditions of work of people in the Mississippi delta, at the Boulder Dam, or in the South American Andes were being investigated partly from the point of view of the physiological interest, but partly to find out whether there were ways in which the workers could be made to function more efficiently. Such a situation can lead to extreme suspicion, and this close association with industry clearly affected the proper functioning of the laboratory. For example, the Andean miners refused to be tested on the bicycle ergometer; thus their maximum work capacity could not be measured. However, many very important contributions were made relating to exercise physiology, climatic stress, high-altitude acclimatization, nutritional requirements, aging, and other matters.



The first treadmill at the Harvard Fatigue Laboratory, 1938. The subject is believed to be Glen Cunningham. Observers are Ashton Graybiel and J. Yule Bogue. [From *The Harvard Fatigue Laboratory: Its History and Contributions*]

Much secret work was done during World War II, but it is shocking to read (pp. 164–65), "We would be remiss if we did not note that many nutritional problems were investigated in the years 1941 to 1945, the results of which were not published in the open literature. They provided much valuable information on nutrition and the methods that could be utilized in large population surveys." If true, it is surely scandalous that such information obtained 30 years ago is not now available when the need for proper food and knowledge of nutrition has never been greater throughout the world.

This book can be read with interest both by historians of science who are interested in how a particular laboratory comes to be created, functions, and finally dissolves and by those interested in exercise physiology in a variety of stressful states, because so much of the crucial experimentation came from this laboratory.

R. E. DAVIES
Department of Animal Biology, University of Pennsylvania, Philadelphia

Life of Broom

Dr. Robert Broom, F.R.S. Palaeontologist and Physician, 1866–1951. A Biography, Appreciation and Bibliography. G. H. FINDLAY. Balkema, Cape Town, South Africa, 1972. xvi, 158 pp. + plates. R7.50. South African Biographical and Historical Studies, vol. 15.

In the fields of vertebrate paleontology, comparative anatomy, and physical anthropology, Robert Broom is so closely comparable in stature and influence to the monumental naturalists of the 19th century that it is hard to realize that little more than 20 years has elapsed since his death. Like many of the giants who preceded him, Broom was educated as a physician, and it was mostly as a practicing physician that he supported self, family, and scientific career for more than 60 years.

Broom cleaning the Sterkfontein skull (*Plesianthropus transvaalensis* Broom, now grouped as *Australopithecus africanus*) at the Transvaal Museum. [From *Dr Robert Broom, F.R.S.: Paleontologist and Physician*]

Many people are still active who worked directly with Broom. One of these is G. H. Findlay, who in recording Broom's career demonstrates the sources of his influence, which lay as much in the impulse to learn, to communicate, to proselytize, and to make his mark, which drove him to furious and single-minded activity throughout his life, as in his quickness and retentiveness of mind. Findlay's account should be useful to anyone interested in the motivation and development of a scientist, for although Broom's world view was strongly colored by Victorian idealism and may seem quaint to many readers, his motivation is more nearly comparable to that of James Watson, as depicted in *The Double Helix*, than it is to that of a Darwin or an Owen.

The book also provides an affectionate but balanced picture of Broom the man, including the inconsistencies and outright contradictions that made him an exasperating as well as a charming and inspiring human being. Finally, Findlay's recognition that the scientist and the man are one leaves us with some understanding of how Broom became a legend in his own time.

Findlay's style is highly conversational and in places disorderly, but this does not detract from enjoyment of the book, or from the information to be gained from it. On the contrary, style rather complements content, for it corresponds to the hell-for-leather nature of Broom's character and career, reflecting his impatience with pedestrian mentality, his verve and excitement in controversy, and his impulsive-appearing dashes halfway around the world, which if often justified by financial needs were always motivated by the requirements of scientific problems with which he was concerned at the moment.

In summary, this is an accurately documented and entertaining account of the career of a man who contributed significantly to the progress of science; it is valuable for its information alone, but he who seeks that information will have a pleasant hunt.

NICHOLAS HOTTON III
Smithsonian Institution, Washington, D.C.

Criticism of a Social Science

The Context of Social Psychology. A Critical Assessment. JOACHIM ISRAEL and HENRI TAJFEL, Eds. Published in cooperation with the European Association of Experimental Psychology by Academic Press, New York, 1972. viii, 438 pp., illus. $19.50. European Monographs in Social Psychology.

This volume is the product of a work group that met in 1970 at Elsinore, Denmark, under the sponsorship of the European Association of Experimental Social Psychology, to carry forward the discussion of fundamental epistemological and methodological issues underlying discontents with the state of social psychology that had surfaced at the 1969 plenary conference of the association at Louvain. The ten contributors come from seven countries.

As Tajfel notes in his introduction, Prince Hamlet would have been at home in the gathering—though he could not have made much of the elaborate texture of abstractions in which the European version of the current crisis of social psychology tends to get expressed in this serious and difficult book. The book will interest American social scientists primarily as a specimen of the best contemporary European thought in the largely American subdiscipline of social psychology. From an American perspective, the culture gap displayed is so great that the book is unlikely to be very influential on our own attempts to come to grips with the crisis in the field. The reader finds himself a vicarious participant in a European debate, rather than a participant in a Euro-American dialog. Nevertheless, American social psychologists need to understand the terms of this debate if we are to reduce our own parochialism. And some of the contributions should be directly useful to us in suggesting promising new directions for inquiry.

In the two postwar decades social psychology emerged in the United States as a field of vigorous laboratory experimentation that applied self-consciously scientific methodology to the clarification and elaboration of small theories about such topics as social influence, social comparison processes, strains toward consistency in beliefs and feelings, and the perception of other persons or the attribution to them of psychological states and dispositions. The results of this productive period are codified in the five volumes of the Lindzey-Aronson *Handbook of Social Psychology*. These American developments attracted the attention of a small number of psychologists and sociologists in both Western and Eastern Europe, and under the leadership of Leon Festinger (the prime mover behind much that was novel and interesting in American social psychology), a committee of the Social Science Research Council played a catalytic role in bringing the European experimentalists together and in proselytizing for the systematic empirical-theoretical study of social behavior on a cross-national basis. The European Association of Experimental Social Psychol-