

a first reference source for individuals who are looking for material on baboons and their use in research. It is less likely to be a major source of new biomedical information unless the information is directly concerned with baboons, for much of the material has been published in scientific journals. Researchers who contemplate the

use of baboons will carefully peruse its contents; those who are considering other species should examine it to determine whether the baboon surpasses the alternative choices.

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Sir Benjamin Thompson, a Biography

Count Rumford of Woburn, Mass. W.
J. Sparrow. Crowell, New York,
1965. 302 pp. Illus. \$5.95.

From 1867 to 1871 George E. Ellis worked through all of the available original documents to produce his monumental *Memoir of Sir Benjamin Thompson, Count Rumford*, which was published by the American Academy of Arts and Sciences in connection with an edition of Rumford's complete works. All subsequent full-length biographies of Count Rumford have been based directly on this classic work. Some have been unscholarly rewrites like *Count Rumford of Massachusetts* by James Alden Thompson (Farrar and Rinehart, 1935). Some have been almost journalistic novels, such as *An American in Europe*, by Egon Larsen (Philosophical Library, 1953), which abounds in historical inaccuracies but which paints a most realistic picture of the Count. This present volume, which was published in England under the title *Knight of the White Eagle*, is as careful a historical study as can be made, using Ellis as a base.

Sparrow has uncovered some original material in England. Here he publishes in book form for the first time some most interesting material that he discovered in the Birmingham Assay Office in the process of doing the research for his Ph.D. thesis, which was on the life of Rumford. He was also instrumental in having the Library of the University of Birmingham buy a copy of a diary which Rumford kept in 1801. Sparrow has also made use of Sir Charles Blagden's *Diary* and of some material in the Royal Institution which Ellis did not use. Thus, Sparrow is the first one in many years who has gone back to some of the original documents.

The book is definitely aimed at an English audience. Although out of his life span of 61 years Rumford spent

less than a dozen years in England, more than half the book is connected directly with his life in England. This, of course, is understandable because it is in this area that the novelty of the book resides, but it does give a rather unbalanced picture of his life. Rumford spent his most productive years in Bavaria, and he carried out many more of his scientific and technological investigations in France than in England.

It is worth commenting on the arrangement of the discussion of his scientific work, which is dealt with in two isolated chapters. I believe that one should not discuss the life of a scientist by separating his science from his everyday living. The whole interaction of a man and his environment is so much involved in the direction which his life takes that it does a disservice to a man of science to categorize his political, philanthropic, and emotional life completely separate from his scientific endeavors. Yet this seems to be common practice in writing about scientists; it is somehow assumed that their scientific contributions are separate from their living in the society of their fellows.

The American publisher is to be censured for a most misleading "come-on" on the dust jacket—"Here is the first full-length biography of Benjamin Thompson, the versatile American scientist who first recognized heat as a form of energy." This is certainly not the first full-length biography; three previously published English biographies are mentioned in this review, and there have been full-length biographies in other languages, including several in German. Also, as Sparrow points out, Thompson did not recognize heat as a form of energy but rather as being produced by the expenditure of work. No such blatant disregard for the truth is evident on the dust jacket of the British edition,

Knight of the White Eagle: A Biography of Sir Benjamin Thompson, Count Rumford (1753-1814) (Hutchinson, London, 1964).

To summarize, one should say that this is a gentle, gentlemanly, and scholarly biography of a man who was far from gentle, gentlemanly, or scholarly. The book is definitely worth reading but one must realize that Sparrow has been even kinder to Rumford than any of his other biographers. Not only does he underplay Rumford's faults of character but he glosses over completely some of the less honorable facets of his life, for example, his mistresses and his illegitimate children. Even Ellis in the early 1870's was not that kind. It is a very friendly biography, is carefully done, and certainly serves to keep the figure of Count Rumford in the eye of the modern public.

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Animal Behavior

Advances in the Study of Behavior.
vol. 1. Daniel S. Lehrman, Robert A. Hinde, and Evelyn Shaw, Eds.
Academic Press, New York, 1965.
x + 320 pp. Illus. \$9.50.

This volume, the first of a series planned to cover recent developments in the field of animal behavior, contains six chapters written by authors actively involved with the particular topics. Although close intimacy with a particular topic sometimes prompted an individualistic perspective, the presentations are enthusiastic and sophisticated with respect to general methodological problems. This interdisciplinary volume should have wide appeal to students and investigators in zoology, ecology, human development, psychology, and anthropology.

T. C. Schneirla presents his theory of biphasic (approach/withdrawal) behavioral processes. The theory is carefully developed and encompasses a wide range of biological and behavioral manifestations (fetal behavior, "innate" perception, neural development, imprinting, contiguity, reinforcement learning, and the like).

The resurgence of research interest in the behavior of newborn infants is reviewed by H. F. R. Prechtl. Multitudinous behavioral observations dur-