

Book Reviews

In their introduction, Clarke and Jacyna declared that “The human element in science is paramount . . .”. Brazier’s work reflects the truth of this, being principally structured around biographical accounts: Deiters (of nucleus fame), Heidenhain (of the surgical pouch) and Wedensky (of Wedensky inhibition) jostle with their more famous nineteenth-century colleagues and rivals. This concentration of personalities often obscures the experiments, ideas, and concepts that induced such friendships or rivalries. A similar criticism applies to neurophysiological apparatus. Several pieces are beautifully illustrated but there is little explanation of the need for, development of and actual use of such equipment. For example, Burdon-Sanderson’s uncertainty in “electronics” [*sic*] is exemplified by his collaboration with F. J. M. Page and an inadequately described illustration of an electrometer built by Page. Fortunately the references permit one readily to find the technical information in the original papers. The bibliographies in this volume are a major strength and compensate to a large extent for a sparsity of detail which has probably served to keep the text to a manageable size. Also of considerable value are the descriptions of the Russian neurophysiologists and some of their work, as much of this material has not previously been available in English. Sadly there are several flaws: Claude Bernard was not concerned with the “milieu anterior” (p. 56); Sharpey-Schafer’s first name was not Ernest (p. 103); and “awarded many honours, including knighthood” occurs so often that it comes as no surprise that Victor Horsley is knighted twice within six lines (pp. 172–73). The book is nevertheless valuable, especially for its illustrations and bibliographies, but will be most useful in conjunction with its predecessor, with which it overlaps slightly, and with the Clarke and Jacyna volume.

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PETER ZUPAN, *Der Physiologe Carl Ludwig in Zürich 1849–1855*, Zürcher medizingeschichtliche Abhandlungen no. 188, Zurich, Juris, 1987, 8vo, pp. 276, SFr. 60.00 (paperback).

Dr Zupan has provided us with an invaluable resource which contains a detailed analysis of the years that Carl Ludwig spent as Professor of Physiology in Zurich, and much more. Those were very important years not only for Ludwig but for the development of modern physiology. For Ludwig they represented his escape from Marburg to a reasonably well-funded chair of his own. They were also the years when both Adolf Fick and Lothar Meyer came under Ludwig’s influence. Zupan begins his thesis with a brief overview of Ludwig’s career, followed by painstaking documentation of the circumstances of Ludwig’s call to Zurich. This, like most other parts of the thesis, is based on excellent primary source material, often reprinted in full, such as letters between Ludwig and the faculty which Zupan has retrieved from the Zurich archives. Not all of the documentary material is from unpublished sources; the letters to Du Bois-Reymond, for example, are familiar, but they are cited to great effect. After analysing Ludwig’s work in Zurich, Zupan reviews each of the dissertations that were conducted under his guidance. In a section devoted to Ludwig as a person, Zupan reaches outside the Zurich experience to gather together later memories and impressions of Ludwig, as written by many of his pupils and colleagues. The previously unpublished material includes many letters from Ludwig to Justus Gaule, written not from Zurich but from Leipzig.

Zupan writes, “By these quotations we hope to give a real impression of the time and personality of Carl Ludwig.” Zupan has done that, but he has done something else as well: he has assembled in one place much carefully selected material about Ludwig, both published and previously unpublished, and about his life and his scientific career. As a result, this thesis immediately takes its place as an indispensable source of information for any future student of Ludwig or of physiology in the last half of the nineteenth century.

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