

how humans and personality are determined by society, using a "logical-historical methodology" leaning on marxist models of individual development. The success of individual psychologists in maintaining informal contact with the west became evident in 1990, when the first joint conferences revealed no major discrepancies between professionals from either state.

The essays collected here are uniformly readable and informative, and are to be recommended to professional scholars and non-professionals alike. They will remain of lasting importance, as well, since they were written before the curricula and perspectives of the newly unified Germany (largely drawing on West German traditions) envelop the distinctive perspectives developed in forty years of official separation.

Journal of the History of the Behavioral Sciences
Volume 30, July 1994

Michael Heidelberger. *Die innere Seite der natur: Gustav Theodor Fechners wissenschaftlich-philosophische Weltauffassung (The Inner Side of Nature: G. T. Fechner's Scientific-Philosophical World View)*. Philosophische Abhandlungen, Bd. 60. Frankfurt/M: Vittorio Klostermann, 1993. 457 pp. DM 118 (cloth).

Steffi Hammer, Ed. *Widersacher oder Wegbereiter?: Ludwig Klages und die Moderne (Adversary or Innovator?: Ludwig Klages and the Moderns)*. Edition Deutscher Verlag der Wissenschaften. Heidelberg/Berlin: Hüthig Verlagsgemeinschaft, 1992. (Reviewed by Katherine Arens)

The texts under consideration here are very different in type but share potential reader interest as valuable contributions on two major representatives of *Naturphilosophie* (vitalistic philosophy).

Heidelberger's *The Inner Side of Nature* is an expanded version of the author's 1988/89 *Habilitationsschrift* (second dissertation for professorial teaching rank), and it shows all the virtues of the genre: magisterial (although not necessarily exhaustive) treatment of secondary literature, thorough historical background and documentation, and careful exposition of central issues in the scholarship (and handsome binding and typesetting). As such, Heidelberger's work serves as an excellent introduction to the life and work of Gustav Theodor Fechner, perhaps the major link between late Enlightenment science and philosophy and that of the early twentieth century, including various versions of vitalistic thought and the critical work of Ernst Mach.

The introduction addresses the received view of Fechner, especially as his work stands between the eighteenth century and more modern thinkers. Next come sixty-three pages of biography that represent an exemplary synthesis of sources, encompassing Fechner's personal and intellectual heritage. The second part of the volume outlines Fechner's philosophy, first as a "non-reductive materialist" and then as a vitalist. These two chapters serve as excellent introductions to Fechner's terminology and problematics. The next section offers four chapters placing Fechner's work in various contexts

("Scientific Realism" "Psychophysics," "Self-Organization," and "Indeterminism"); each treats the theoretical problems with copious and well-explicated reference to Fechner's works, and then in historical scholarly contexts.

Of particular use for historians of the behavioral sciences will be chapter five, on psychophysics, which clearly introduces the fundamentals of psychophysics, especially the possibility of empirical research about the human sensory mechanisms. Then, Fechner's scholarly contemporaries are discussed, including Jules Tannery, G. E. Müller, Herman Cohen, and Ernst Mach. In the following sixth chapter, Heidelberger traces how Fechner anticipates later notions of the organism and the biological systems of the universe. Finally, as an appendix (together with a bibliography of secondary literature and an index of names), Heidelberger includes the text of Fechner's personal narrative curriculum vitae, and the original publication of a letter written in German by Ernst Mach to William James, indicated his reliance on Fechner's work (and rejection of his "spiritualism"). All in all, Heidelberger's work may not exhaust Fechner scholarship, but it definitely is the starting place for anyone who intends to work on Fechner.

In a much more popular and hence quite different approach, Steffi Hammer's volume of papers on Ludwig Klages brings together the widely-varying contributions to a conference held between 21 and 23 May 1992 at the Martin-Luther-University at Halle/S. While well-edited, it, too, bears the marks of its genre, including a number of individual contributions that probably sounded better as speeches than they read as articles. However, taken together, they successfully introduce the life and work of Ludwig Klages, one of the founders of the modern sciences of characterology, the study of human expression, and graphology, who also was influential for vitalist philosophy and the ecology movement. The editor hoped to (and did manage to) recover the strain of non-rationalist thought that Klages occasioned in many disciplines, and thus to reestablish his significance for twentieth-century scholarship. Despite the unevenness of the twelve individual contributions, each is informative in one way or another, outlining Klages as everything from a philosopher and gnostic to a founder of the organic gardening movement.

For the present context, four essays are of particular note: Hammer's own "Ludwig Klages: A Justifiably Forgotten Chapter in the History of Psychology?," Reinhard Mocek's "Romanticism and the Spirit of Science: Schelling - Carus - Klages," Gerda Jun's memoirs on her experience as a psychiatrist stimulated by Klages, and Maria Paul-Mengelberg's discussion of "Drives and Will in Klages' Work, and its Significance in Handwriting."

Hammer's essay is an exemplary biobibliography, presenting Klages' life and work in context, then moving to a discussion of his later reception, both in the FRG and GDR. Jun's essay is an interesting personal memoir, elaborating on the experience of a practicing GDR psychiatrist who finds questions like Klages' missing in the psychiatric treatment in her country. Paul-Mengelberg presents Klages' notion of will and instincts (drives) as formative of the character, and gives examples of how his mode led to the systematic interpretive strategies of graphology—a convincing explication of how this study could be considered a science. Finally, Mocek's essay explores the continuities between Klages' *Mensch und Erde* (*Human Being and the Earth*) and his nineteenth-century precursors, Friedrich Wilhelm Joseph Schelling (1775–1854), who took up Spinoza's idea of humans as part of the greater plan of creation, and Carl Gustav Carus (1789–1869), who expanded this into a call for a holistic concept of nature. He stresses that Klages turns away from this holism, not to reject rationalism itself, but rather the abuses of rationalistic methodology that characterized later science.

For different reasons, neither book is an easy read: the essays in Hammer's volume too often veer towards the popular, while Heidelberger can lapse into academic boilerplate (the clear variety, at least). Still, each will well serve any scholar who needs an introduction to the works, issues, and scholarship on these two seminal and undeservedly unfamiliar thinkers.

Mr. Heidelberger Responds:

All in all, Katherine Arens wrote a positive and sympathetic review of my book. (Its title could perhaps better to be rendered in English as *Nature from Inside*.) Even if risking to appear ungrateful and pedantic I feel urged to make three comments:

First, Romantic *Naturphilosophie*: I was astonished to see how unscrupulously Arens equates *Naturphilosophie* with vitalism. Being a *Naturphilosoph* did not necessarily mean being a vitalist and vice versa. This point would not be so important if it would not lead to another misconception of *Naturphilosophie* and in turn of Fechner which is much worse. I was shocked to read that Fechner is supposed to be one of the "major representatives of *Naturphilosophie* (vitalistic philosophy)". As I try to show in my book over and over again, Fechner's philosophy is a creative *transformation* of Romantic *Naturphilosophie* that leaves most of its central tenets behind. It could as easily be conceived as one of the most important criticisms of *Naturphilosophie* in the 19th century. It seems to me that Arens unconsciously perpetuates 19th century categorizing and reasoning. Anybody who does not side with, say, Helmholtz's physiological reductionism or with Büchner's materialism necessarily had to be a *Naturphilosoph* or a vitalist or both. The originality not only of Fechner's but of much contemporary work in Leipzig (and of much work in the Austro-Hungarian hegemony influenced by it) exactly lies in the inapplicability of this cliché.

Second, Fechner scholarship: The reader should know that this book is not just a contribution to the (nascent) Fechner industry but that it tries to develop general claims out of the new Fechner image. These claims would have important effects on our view of the history of experimental psychology, of 19th century philosophy in general and, not the least, of the philosophy of science. Fechner's philosophy—the seed for his psychophysics—is the "missing link" between German Idealism and, via Ernst Mach and Richard von Mises, Logical Empiricism of our time.

Third, exhaustiveness: I would have appreciated it if we would have been told where the book fails to be exhaustive to an extent worth being mentioned in treating the existing secondary literature. The only respect which comes to my mind where this could be the case is admitted in the introduction of the book. I wanted to limit the discussion of Fechner's empirical aesthetics in order to keep the book to a readable size.