

cal empiricism (phenomenalism, anti-atomism) of Mach. This is clearly brought out in the remarkable essays by R. S. Cohen, Erwin N. Hiebert, and especially Gerald J. Holton. Mach, whom his contemporary William James considered an intellectual star of the very first magnitude, still looms large as an experimental physicist and as a philosopher of science. Essays by R. J. Seeger and W. F. Merzkirch deal with Mach's important contributions to gas dynamics and the physics of shock-waves. Philosophically significant discussions of the implications of Mach's views on various subjects (including psychophysiology, gravitation and inertia, relativity, geometry, and functional relations) are presented by Floyd Ratliff, Peter G. Bergmann, Karl Menger, and Hubert Goenner. There are also helpful biographical and bibliographical articles by Otto Blüh and Merzkirch. In the appendixes two very valuable essays by Philipp Frank and one by Richard von Mises (all three on Mach's philosophy of science) are republished.

Although Mach is currently (of course!) regarded as mistaken in his opposition to the atomic theory and to the theory of relativity, it is most interesting here to obtain more detailed information than is usually available on the development and motivation of his ideas regarding these matters. The controversial "Mach principle" (relevant for cosmology) is discussed in several articles. The only omission I noted is the absence of even a reference to Clifford Truesdell's views regarding the history of mechanics, which differ sharply from those of Mach. This (minor) shortcoming notwithstanding, the editors of this book are to be congratulated on their success in assembling an excellent set of essays.

HERBERT FEIGL

Minnesota Center for Philosophy of Science, University of Minnesota, Minneapolis

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