

FOREWORD
by Rudolf Carnap

Hans Reichenbach (1891-1953) was one of the founders of the movement of scientific philosophy or logical empiricism, and one of its most vigorous and most productive representatives. In Essay IV of this book, Reichenbach has clearly outlined the aims and methods of this new way of philosophy which is characterized by its close relationship to scientific work. In contrast to traditional philosophy, which starts from either pure intuition or pure reason, empiricism takes as its point of departure the picture of the world as it is built up by scientific investigation and subjects it to careful analysis. It strives to reveal the main features of the scientific method by a logical analysis of the hypotheses, observations, and conventions which enter into the construction of a scientific theory. Empiricists regard this analysis of science, rather than pure introspection, as the best approach to a clear understanding of knowledge. Scientific knowledge is not considered as fundamentally different from everyday knowledge, but merely as a further development of it in more systematic form.

Scientific philosophy in this sense does not lead to a grandiose speculative system, but rather to piecemeal clarifications. The construction of large-scale systems is a beckoning goal even for the scientific philosopher. But in philosophy, just as in science, such construction can be attempted only after a large number of smaller problems have been solved, usually by the laborious work of many thinkers.

The papers collected here illustrate well the method of philosophy just characterized. They let us see a philosopher at work in various periods of his life. The first two essays analyse some basic conceptions of Einstein's and Newton's physics. Essays III and V deal with the problem of causality which finds its most exact expression in physics but which is fundamental for all the empirical sciences. Essays IV and VI are more general; they characterize the new method of philosophy and the roles of reason and experience in the process of acquiring knowledge. The last two essays deal with the problems of practical decisions and value statements; their main aim is the clear separation

of the practical, volitional components from the cognitive components of judgments in the field of decisions and values.

These essays should be especially welcome to British and American readers since, with the exception of Essay VI, this is the first time they have been published in English. They are arranged in chronological order. The first papers were published in German in the period from 1921 to 1932; they let us feel the élan and the optimistic anticipations of a pioneer in the newly opened field. Reichenbach subsequently developed the conceptions formulated here and presented them in a more definitive form in later publications. The last two essays were unfinished at the time of Reichenbach's sudden death. His wife, Maria Reichenbach, has brought them into their present form by careful editorial work, faithful to the intentions of the writer. A valuable addition is the complete bibliography of Reichenbach's philosophical and scientific publications.