Scientific Nominalism.

Les concepts scientifiques. Par Hélène Metzger. Ouvrage couronné par l'Académie des Sciences morales et politiques. (Bibliothèque de Philosophie contemporaine.) Pp. x+196. (Paris: Félix Alcan.) 12 fr.

THE twentieth century, and especially the last decade, has seen a remarkable development of consideration by working scientists of the philosophic implications of their labours. Biologists, as well as workers in the physical sciences, are studying the theory of knowledge in the light of their own work.

In the volume before us, Madame Metzger endeavours to generalise the categories within which scientific concepts may be grouped. She starts from the thesis that classification is a primal need of the human mind. We need to sort out the infinite complexity of experience, to make some choice of the matter of our own thought. Only by what is in ultimate analysis a process of classification can we embrace many phenomena in a single series of considerations.

Classification, Madame Metzger points out, is necessarily based on analogy, which may be to a greater or a lesser extent the construction of the mind itself. In considering a group comprising a number of phenomena or of series of phenomena, the mind so frames the boundaries, both of the group itself and of each series within the group, that they may conform to the analogical framework within which the mind chooses to work.

Having established the thesis that classification, based on analogy, provides the foundation of all mental activity, including that of the scientist, Madame Metzger proceeds to the analysis of the various patterns of those groupings of experience that underlie the formulation of various hypotheses that have held the field in science, and especially in chemical science. In each theory she traces the use of analogy as the basis of the concept of scientific law. Almost as pervasive as the concept of analogy is, she shows, that of evolution or development, which she distinguishes as "divergent, parallel, or convergent", each in turn based on analogy, that is, on a grouping of phenomena in such a fashion that it may be possible to ascribe to each group certain common properties or common relationships, while the groups themselves, considered as entities, may be similarly connected by common properties or relationships. "Perhaps", says Madame Metzger, "the complete image of Nature cannot be embraced in the monu-

ment erected by human intelligence . . . but the partial success attained assures us that evolutionist frameworks are, at least to some extent, in harmony with reality."

The final part of the work considers to what extent 'scientific nominalism' does in fact extend our interpretation of scientific concepts, and ends on a warning that classification tends always to be based on a process of abstraction which gives only a partial reflection of Nature.

DOROTHEA WALEY SINGER.

Our Bookshelf.

The Science of Folk-Lore. By Dr. A. H. Krappe. Pp. xxii + 344. (London: Methuen and Co., Ltd., 1930.) 10s. 6d. net.

DR. KRAPPE was inspired to write this survey of the field of folk-lore by his visit to the congress held in London in 1928 to celebrate the jubilee of the Folk-Lore Society. The necessity for such a handbook was presented to him through his opposition to the methods and outlook of the so-called 'anthropological school'. Hence the existence of a handbook, published by the Society and prepared under the editorship of the late Miss C. S. Burne, is not mentioned. Throughout Dr. Krappe is very critical of Andrew Lang and the colleagues who with him were the foremost exponents of the anthropological method in Great Britain, nor will he admit the historical point of view of the late Sir Laurence Gomme. Nevertheless, he recognises the results achieved by the anthropological method in the hands of such a master as Frazer, whom indeed he regards as transcending all schools. He himself belongs to the school which subjects the material of folk-lore to the strict canons of literary and historical criticism.

Dr. Krappe, of course, has no difficulty in showing that the results attained by the uncritical application of the anthropological method are often unwarranted and sometimes absurd. That, indeed, might apply to any method injudiciously used. On the other hand, while the method of which he is the exponent may prune away some exuberances in the handling of fairy tale, folk-tale, and myth, as has already been done by certain English writers, yet even in Dr. Krappe's treatment of such subjects as magic, ritual, and superstition, the interpretation of the ultimate residuum after the application of the literary method must rest with the comparative method of the anthropologist whether the matter *sub judice* be an independent invention or the result of diffusion from a single origin.

Romance of the Planets. By Mary Proctor. Pp. xii + 272 + 8 plates. (New York and London: Harper and Bros., 1929.) 7s. 6d. net.

MISS PROCTOR must certainly be counted unfortunate in having brought out this little book just before the discovery of the extra-Neptunian planet, Pluto. She has narrowly missed being the author of the one up-to-date book on the planets, and the romance