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NEWTON AS A HISTORIAN

Isaac Newton: Historian

By Prof. Frank E. Manuel. Pp. viii+328+12 plates. (Cambridge: At the University Press, 1963.) 60s.

THE activity of Isaac Newton in the field of chronology and in the still more hazardous one of apocalyptic lore has always appeared to the admirers of his achievements in natural philosophy so out of tune with the latter that they have been at great pains to produce some kind of explanation—not to say apology—for it. However, their approach has been so dilettantish and so curiously lacking in serenity as to be completely fruitless. At long last, this challenging problem has now been taken up, in the wake of the present-day revival of Newtonian studies, by a scholar well armed for the task. It is rare indeed to see such an uncommon combination of immense erudition and profound historical and human insight brought to bear on an obscure point of the history of science with such a satisfying result.

Prof. F. E. Manuel reveals in his introduction that his initial purpose was just the edition of an unpublished Newtonian fragment entitled "The Original of Monarchies" (which is indeed given with adequate commentary in an appendix to the present book); but as so often happens to conscientious authors, he was gradually led from this modest beginning to extend his investigations to a whole field of seventeenth- and eighteenth-century scholarship practically unexplored, and in which Newton's work finds its natural place. He was thus enabled to give us much more than an elucidation of the character of Newton's historical interests; he introduces us to the unfamiliar intellectual background against which Newton's attitude must be assessed. From a thorough analysis of the sources, he draws a vivid picture of a stage in the treatment of historical problems which, however remote from the severe principles of historical criticism elaborated since, already shows the first fumbling efforts in the right direction. It is no enviable task to scan thousands of dreary pages in order to discover the conceptions and motivations of these laborious writers, and Prof. Manuel deserves our gratitude for having accomplished it so well. The lucid, elegant and objective exposition of his findings and conclusions carries conviction, and even the duller parts of a subject which, though important, is not very inviting, are made palatable by an appropriate touch of humour. This book is thus likely to remain for many years the standard authority on the formative period of the development of historical method.

It is hard, even under Prof. Manuel's able guidance, to recapture the spirit in which the historians in Newton's time approached their studies, so disconcerting is to us this mixture of rationalism and mysticism, which rendered their controversies so utterly futile. We may reconcile ourselves with the excesses of their tendency to rationalize the ancient myths, which led to a curious revival of euhemerism, even though we may be startled at their apparently boundless credulity: what is more difficult is to imagine ourselves fettered as they were by religious authority. For the dimension of time, a Copernican revolution was still to come. The belief in the 'literal' meaning of the biblical tradition narrowed the historical horizon to such an extent that people like Newton and many others could embark on the task of tracing the

development of human civilization from its first beginnings with the conviction that this tradition, supplemented by whatever bits of evidence could be gathered from the classical authors, provided a sufficient basis for its accomplishment. So confident were they of following a prescribed path leading to truth, that in setting up their ingenious systems they were not even conscious of distorting the evidence when they tried to 'harmonize' it with their hazarded readings of the sacred books. Even on the mildest possible view, this misguided effort of the early chronologists and interpreters of scripture remains one of the most pathetic of those cases of self-delusion in which the history of human thinking abounds.

Among the scholars engaged in such pursuits, Newton appears as no worse, but no better, than the others. Some had more erudition than he displayed, and some (it must be said) more common sense. Divested of the aura of mathematical genius, he is just an able scholar without much originality or distinction, steeped in the modes of thought of the time and all the current political and theological controversies. Much has been made of his unitarian views; but, although he showed himself capable of firmness and resolution on other occasions, it is painfully obvious that he deemed a secure position in society more important than an open defence of these views. He had no need, however, to conceal the rabid anti-papism which he shared with the Puritans, and this—perhaps his only—passion proved fatal to his power of judgment in historical matters. Identifying papist idolatry with paganism, he was anxious to vindicate God's chosen people as the founders of civilization and to expose the pagan culture as error and deception; and he was apparently unconcerned with the risk that such preconceived opinion would bias his argumentation.

On the other hand, the mental attitude that characterized Newton's approach to natural philosophy could not fail to leave its mark on his historical investigations also. One recognizes in all his writings the same scrupulous care for detail and the same logical rigour (however misapplied, sometimes, to premises of doubtful value). Even the interpretation of the prophecies was treated by him as a purely rational problem: he took for granted that each element of the prophetic tales was a symbol with a definite, unambiguous meaning, and he accordingly conceived the task of interpretation as one of decoding a cipher. Once this striking unity in Newton's outlook is realized, the analysis of his historical endeavours can throw light on the real nature of what appears to us as the shortcomings and strange mystical undertones of his view of the physical universe. The tendency to rely too much on rational argument based on too few premises is equally noticeable in Newton's chronological system and in his optical controversies. His conviction that the reconstruction of the history of mankind is a narrowly limited problem, for the solution of which we already possess all the data, is paralleled by his equally strong assurance that the cosmological problem is reduced to the account of the motions of a unique, limited system of heavenly bodies. Just as he hoped to read God's message to mankind by deciphering the scriptures, his aim and dream in unravelling the laws of matter were to grasp the very mechanism by which God's direct intervention regulated the harmony of the world. The failure of this double quest was the tragedy of his life.

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