

## PHILOSOPHICAL AND BIOGRAPHICAL ESSAYS

### Ethics and the History of Philosophy

Selected Essays. By Prof. C. D. Broad. (International Library of Psychology, Philosophy and Scientific Method.) Pp. xiii+274. (London: Routledge and Kegan Paul, Ltd., 1952.) 21s. net.

PROF. C. D. BROAD here reprints selections from articles and public lectures produced between 1925 and 1949. They are very welcome. The first, biographical, section of the book contains essays on Isaac Newton, John Locke, Henry Sidgwick, J. M. E. McTaggart and W. E. Johnson. The first two celebrate centenaries of famous men, and fulfil their function gracefully. The last two are useful reminders of thinkers recently dead, who were never fashionable and are never likely to be. Yet, when all the more fashionable philosophers are forgotten, they may be remembered—McTaggart for penetrating criticism and daring attempts in philosophical method, and Johnson for fertile conceptions not yet fully developed. Prof. Broad knew them personally and gives a pleasing sketch of their characters as well as a useful brief account of their work. Sidgwick belonged to an earlier generation of Cambridge philosophers, one of the most distinguished, and yet he stands even more in need of commemoration.

The essay on "The Philosophy of Francis Bacon" is the most valuable feature of the section headed "Philosophy of Science". Bacon has been extravagantly praised and extravagantly defamed; very few have stopped to consider carefully what he had to say, and nobody has summed it up better than does Prof. Broad here. The second essay, called "The New Philosophy: Bruno to Descartes", is a clear straightforward account of the main features of Thomist cosmology and of what Descartes proposed to put in its place. Bruno does not come into the story except by being born in 1548, when cracks in the old cosmology were beginning to be visible. In the third essay, "Leibniz's Last Controversy with the Newtonians", Prof. Broad analyses the argument of his correspondence with Samuel Clarke, and gives also some interesting information about Clarke himself. This correspondence makes a difficult and disappointing book. Neither disputant seemed able to see what the other was trying to get at, and both acted in accordance with Disraeli's advice—"Never argue with an opponent; repeat your original statement". This advice is not as useful in philosophy as in politics. Many who have been baffled by the book will welcome Prof. Broad's account, and particularly his analysis of the rival theories of space and time.

The section headed "Ethics" begins with Prof. Broad's inaugural lecture as Knightsbridge professor in Cambridge. This must have made it clear to hesitant undergraduates that during his tenure of the chair the subject of moral philosophy would not be a soft option, but a strenuous intellectual exercise in the analysis of ethical concepts. All four constituents of this section are examples of this. The second one, on "Egoism as a Theory of Human Motives", shows that it is a far more difficult theory than simple-minded egoists suppose. The one entitled "Ought We to Fight for our Country in the Next War", besides its intrinsic interest, must have provided an effective douche of cold water for young intellectuals of the 1930's who were too clever and up to date to

fight for anything but ideologies. The last essay, on "Conscience and Conscientious Action", is an admirable example of clarity and good sense on a theme where confusion and nonsense too often prevail, equally on the side of those who claim conscience as an infallible guide and those who claim that it is an illusion of the bourgeoisie. A. D. RITCHIE

## TIME AND EVOLUTION

### Time's Arrow and Evolution

By Harold F. Blum. Pp. xi+222+4 plates. (Princeton, N.J.: Princeton University Press; London: Oxford University Press, 1951.) 25s. net.

DURING most of the period in which people have argued about things, the legal, medical and military importance of the distinction between a living and a dead animal or man was recognized; but no advantage was seen in erecting the metaphysical concept of the living or non-living state. During the seventeenth and eighteenth centuries a liking for the distinction developed and hardened into a complete dichotomy at the end of the last century. The hardening is often attributed to Pasteur, but this is unfair to him; he demolished with humour and emphasis all the claims made for "spontaneous generation" but still said he thought it could happen. This attitude of believing in a possibility while disbelieving in alleged examples of it permeated the writings of Huxley and Tyndall and has now become common among biologists.

The older writers realized that they knew too little about the primitive state of the earth to make speculation on the origin of life profitable; but as knowledge increases the temptation to speculate increases too, and we now have a steady stream of books on the subject. Dr. H. F. Blum has written one of the better books in this category. He surveys cosmogony, geochemistry, thermodynamics and biochemistry briefly but in a manner adequate for his purpose. He then sensibly points out that primitive forms of life might well pass unrecognized if present-day standards are used, and that a point of origin could arbitrarily be placed almost anywhere along a thousand million-year stretch in the Pre-Cambrian. Making use of this permitted arbitrariness, he chooses as the origin of life the time when proteins first appeared; but he does not explain how, rigidly, he would define a protein. This is the main weakness of the book, for there is no reason for assuming that proteins are the basis of the only possible mode of existence of organisms on the earth. It is obvious that they play a basic part in the most successful way of living, and it is probable that they have done this throughout the five hundred million years of morphological evolution which is the only period about which we have any evidence. But it is a pure assumption that this was also so during the earlier millennia of biochemical evolution. We have so often been led into error by assuming that biology is simple that we should be wary of all unjustified, and it may be said unnecessary, assumptions.

This book achieves what it sets out to achieve. It is popular, written in a popular manner and embellished with some very popular analogies. The author only claims originality for the idea that in the pre-vital phase of the earth's history the adenosine triphosphate cycle evolved and that it engineered the synthesis of primitive nucleoproteins. This is a dis-