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BEYOND THE 'TWO CULTURES'

Towards a Third Culture

By Charles Davy. Pp. 178. (London: Faber and Faber, Ltd., 1961.) 18*s*. net.

THE conception of two cultures, the humanist and the scientific, has given rise to animated discussion, to which Mr. Davy's book is a welcome contribution because it attempts a constructive understanding of the situation. Two important ideas form the core of his thesis—that of the evolution of consciousness and that of the possible development of a "third culture" together with a new mode of consciousness, which would be a synthesis, and more than a synthesis, of the two with which we are acquainted.

Naturally, the argument is to a large extent speculative; but it is conducted with adequate knowledge, both of science and history, and with logical awareness. Mr. Davy believes that the gap between the old and the new culture is rapidly widening and that an entirely scientific culture may become so dominant that the values of the older culture would "survive only as eccentricities". The evolution of consciousness so far has been manifested in the rise of the scientific culture which has been associated with a new mode, or focus, of consciousness. The names chosen by the author for the two consciousnesses are sufficiently indicative of their nature—the 'participating' and the 'onlooker' consciousness. It is an important part of Mr. Davy's thesis that the scientific culture presupposes a consciousness which is aloof and distinct from the object, from 'nature'. The discussion of the gain and the loss which result from the transition to the onlooker consciousness is well worth attention.

There is no attempt to minimize the value or the inevitability of the scientific outlook; it is maintained, however, that there are other ways of knowing and experiencing which can display aspects of reality with which the scientific method cannot deal. The character of the third culture and the more comprehensive consciousness must remain largely conjectural, since they exist so far only in rare and eccentric individuals. Mr. Davy brings in here references to 'seers', which will disturb some readers; Rudolf Steiner is prominent among them. I hope that this part of the book will at least be read with respect, for it would be wrong to reject the 'seers' out of hand as victims of illusion. It must be owned, however, that their visions are incapable of verification and do not altogether cohere with one another. How far they indicate 'something beyond' the Nature studied by science is an open question. *Towards a Third Culture* is a stimulating book, of interest to all who are concerned about the nature of human intelligence and its probable future. Does consciousness evolve and, if so, how and whither? These are fascinating questions.

W. R. MATTHEWS

ORGANIZED THINKING AND EVOLUTION

The Nature of Life

By Prof. C. H. Waddington. Pp. 131. (London: George Allen and Unwin, Ltd., 1961.) 18*s*. net.

PROF. WADDINGTON is distinguished not only as a professional biologist but also as a leader of thought. In earlier centuries he would have been called a philosopher; but to-day's restriction of philosophy to logic, metaphysics or semantics forces him into the slightly pejorative category of 'thinker'.

In this short book he continues to illuminate our thinking about life, human as well as organic, in respect of its nature as a process, its methods of operation, and its results.

He begins by pointing out that science must always be concerned both with understanding and control, and that scientific theories which suggest new advances are often preferable to logically tidier, but less suggestive, theoretical models. He emphasizes the barrenness of 'nothing-but' views which vainly seek to explain complex results in terms of simpler origins, and proceeds to a useful discussion of the two main types of approach now prevalent in biology, which he calls "atomistic" and "continuum" theories, the one aiming at analysis of biological processes and structures into their ultimate components, the other at understanding them as wholes, operating through organized systems in which the parts are interrelated. Both are necessary; but over-emphasis on either leads nowhere. Elsewhere he uses the terms "substance" and "architecture" to characterize the two approaches: one might also suggest 'particulate' and 'organizational'.

He later points out that biological systems, from the genetic outfit to the cell, the individual, the population, and the ecological community, are all organizations with some capacity for self-regulation, and stresses the importance of unitary self-regulating fields and gradients in development.

He very usefully summarizes his own special contributions in this area. First, the realization that the process of development is genetically 'canalized' into a limited number of paths, each of them resistant to interference. For such genetically initiated and largely self-regulating systems of developmental change, he proposes the useful term *creode*, or "necessary pathway". Secondly, his discovery of *genetic assimilation*, whereby, through the operation of orthodox natural selection on genetic capacity to react to environmental modification, the Lamarckian inheritance of acquired character is simulated.

Both this pseudo-Lamarckian mechanism and that of creodic canalization involve cybernetic feed-back, and therefore cannot be adequately described in purely deterministic causal terms. In fact, 'arguing in a circle', or rather in a feed-back cycle, must be a feature of our new cybernetically based biological thinking. This applies also to evolution. At all levels