

Kirk's excursion into the Structuralist camp. His mistaken reading of Lévi-Strauss, his insistence upon speculative, intellectual faculties in myth and his conflicting definitions of myth, tale, folktale and story tend to confuse the reader. It is also distressing that he ignores Lévi-Strauss' point that the variations of mythic structure, which pose and solve problems, are really the most important (not

content similarities). In spite of his reading of Lévi-Strauss and Malinowski, Kirk does work well in the area of classical scholarship and treats the question of mythic evolution in Greece with an experienced hand. If one is aware of the problems in his analysis of the functionalist and structuralist viewpoints, the book makes interesting and good reading, if at times a bit technical. MICHAEL WEST OBORNE

**BEHIND APPEARANCE: A study of the relations between painting and the natural sciences in this century,** by C. H. Waddington. *Edinburgh University Press*, 1969. 256 pp. £9.

There seems to be a general and growing opinion amongst the cognoscenti that science and technology have affected and are affecting profoundly the whole nature of our cultural environment, and this is supposed to explain why modern art, music, poetry, cinema and drama are 'difficult'—because so are modern science and modern life. In other words, C. P. Snow, as Susan Sontag contends, is wrong, and there are not two cultures, but one. C. H. Waddington, Professor of Animal Genetics at Edinburgh University, implicitly endorses this point of view as far as painting is concerned, and spells out some of the connections between painting and science from the cubists to Pop Art and the 'Hard Edge' geometrizers.

The book divides fairly clearly into two parts, corresponding to the periods before and after the Second World War. Before then, one revolutionary scientific idea which had to some extent diffused into general consciousness was Einstein's Theory of Relativity, which told us that our intuitive ideas of fixed space and absolute time were wrong, and that space and time were interdependent. To oversimplify the argument somewhat drastically, Waddington claims that cubism was a reflection of this new importance given to three-dimensional space, with time as the 'fourth dimension'. This was not conscious or deliberate on the part of the painters, and the author makes the connection in a generalized and open-minded way; for example, Chirico has in common with scientists merely a 'sense of the marvellous'. In the same period, the Dada painters are most remarkable, in this context, for their reaction against the rationality of science, for the influence of biological ideas (Arp); and the Surrealists for their debt to Freud—a debt which they paid off rather over-enthusiastically.

It is the period after the Second World War

that is the richest in material for Waddington. He explains at some length the scientific developments of the quantum theory in physics, and the roles of chance and of order and chaos in biology, and then expounds the ideas of Whitehead, whose philosophy of 'everything is part of everything else' has obvious roots in Heisenberg's Uncertainty Principle and the resultant 'fuzziness' and inexactness of our intuitive description of the atomic and sub-atomic world. And so armed with this tool for interpretation, it is but a short step to begin to appreciate de Kooning and Jackson Pollock, and indeed Rothko. This section is long and interesting, and to attempt a summary would be unjust to the author's careful and ungeneralized treatment of his theme.

Richard Hamilton, Roy Lichtenstein and the other Pop artists are exploring the technological, rather than the scientific, aspects of our world; and Op art is not so influenced by science as we might think. Finally, there are some very interesting remarks about Giacometti's realism; his 'insistence on the otherness of things, and that what we know about them is not their own private essence, but the influence they radiate on their surroundings'. Professor Waddington is surely right in seeing this as profoundly influenced by modern science.

An extremely interesting issue that arises during the book is a consideration of the *activities* of science and painting, and there are extensive quotations from scientists and painters about their work. Thus Jackson Pollock: 'When I am in my painting, I am not aware of what I am doing. It is only after a sort of "get acquainted" period that I see what I have been about. I have no fears about making changes, destroying the image, etc., because the painting has a life of its own.' Compare this with Heisenberg: 'In science man confronts himself alone.'

And Rothko's 'I am for the simple expression of complex thoughts' has a nice parallel in Einstein's  $E = mc^2$ , that simple and bafflingly profound equation. (One of the only three typographical errors I noticed is that this appears as  $E + mc^2$ !) Again, I am sure that the author has put his finger on a very important fact.

The volume is beautifully produced, with stuck-in prints and pleasing typography, and this also contributes to the pleasure of reading the book. While I was not struck by the profound originality of the book, it is certainly well thought out and is always interesting.

LEWIS RYDER

**A VARIETY OF CATHOLIC MODERNISTS**, by Alec Vidler. *Oxford University Press*. £2.50 (50s.).

Those who have read Alec Vidler's earlier books will no doubt be looking forward to his latest one. And in many ways they will not be disappointed. It is the outcome of careful scholarship, drawing upon many unpublished or not easily obtainable documents, and thus providing an access to much interesting information, enlivened, as always, by a personal but unbiased interest in the men and events dealt with. In a book so obviously the fruit of close research (as the careful annotation, for instance, indicates) it is refreshing to find Paul Sabatier called, so aptly, 'the great busybody of the movement' (p. 108); or the reason for treating Blondel briefly, given in so direct a statement as: 'I do not feel qualified to do justice to Blondel since I find his thought obscure, his style insufferable and his temperament uncongenial' (pp. 79-80).

Yet, in spite of these complimentary qualities, and in part because of them, the book is in some ways curiously unsatisfactory. For it appears to be an attempt to do two things at once: to give biographical introductions to the less well-known men connected with the Modernist movement (such as Alfred Fawkes or Lucien Lacroix), and to deal, at some depth, with the differences in thought both of these and of the more prominent 'modernists' such as Le Roy and Laberthonnière, the treatment of the former being additional to that already contained in Vidler's *20th Century Defenders of the Faith*. It is, of course, reasonable to expect some knowledge of men like Loisy and von Hügel, and not of the 'lesser lights and fellow travellers' (and the exclusion of George Tyrrell in favour of A. L. Lilley is precisely on the ground that the former is already well known);

but this does not make it any easier for the reader of what is a relatively short book to adjust, on the one hand, to the sort of careful treatment given in the first two chapters to the question of Loisy's sincerity, and on the other, to thumb-nail sketches of some fourteen men in as many pages. This kind of ambivalence of treatment—and therefore of presupposed interest and knowledge—is also accentuated by those discrepancies of style to which the spoken, conversational lectures turned into written book are always open.

Nevertheless the book remains both interesting and enjoyable. Particularly good—because combining most happily the necessary background information with assessment—are the chapters on Edmund Bishop ('An unrecognized Modernist' as Vidler calls him) and on Marc Sangnier and the *Sillon*. But anyone whose interest is in Loisy should certainly read the first two chapters. Having done this every reader will wish to continue, and will find in what follows much that is new, and much that is stimulating to further research (to which the bibliography will be of great help). Of most value is the picture which emerges of the nature of the relationships between these very varied figures, obtained through numerous quotations from their letters to and about each other: comments sometimes adverse, sometimes sympathetic, serving to underline once again the diversities of thought and approach to contemporary problems of those whose views the encyclical 'Pascendi' systematized and stigmatized (and the book raises the question 'With what justice?') as 'Modernism'.

S. MARY JADWIGA, O.P.