

in this field. Given this, it is a pity that the positive philosophical analysis is so thin, as I suspect the presentation of the psychoanalytic material might strike a professional analyst as being. The author is better at clearing up a messy literature than in adding substantially to the best of it.

This judgment can be supported with one illustrative point. It is granted early on (page 75), as part of what constitutes a psychoanalytic explanation, that the literal truth of childhood incidents referred to in it need not be checked; it is enough that they are part of the patient's "psychic reality". That may be standard practice, but in a discussion of the logical status of such explanation, it needs more questioning than it gets. It makes a great difference, for example, to its causal status, whether such incidents themselves, or merely their analytically inspired and possibly inaccurate recollections, are the material of psychoanalytic explanation, even if it makes no odds to the therapy. One would naturally prefer the former, to give scope for independent (for example, neurophysiological) enquiry into the presence of the persisting personal characteristics induced by the incidents, which are invoked in explaining behaviour years later. Analysts, however, Sherwood notes uncomplainingly, give us the latter, and this should really have provoked a deeper discussion of the explanatory value of narratives which, for all the narrator cares, may be largely fictional.

Similarly, many other points in the book provoke a desire for more detailed and searching enquiry along Sherwood's very sensible lines. In short, it is a good introductory book to a field strewn with pitfalls; a book to be read, but by no means a book to be satisfied with.

D. H. MELLOR

REACTIONS TO INJURY

Tissue Repair

By R. M. H. McMinn, with a chapter by J. J. Pritchard. Pp. ix + 432. (Academic Press: New York and London, 1969.) \$23.50; 219s 4d.

THIS book is devoted specifically to histological and cytological details of repair in mammalian tissues and organs. It is an attempt at a comprehensive survey and includes summaries, and in places details, of many experiments about repair and regeneration of tissue after a variety of simple injuries. It is thus of interest to all those who work in these fields and to others, such as pathologists, who are confronted with the understanding of such problems when the aetiology is a natural disease process. Those who are active researchers into tissue injury and repair usually work with one or a few tissues in the fundamental issues of which they are well steeped. To these it is very useful to see accounts of and references to work in other tissues, to find out what problems are near solution and the many which are wide open.

Thus, those who seek a solution to the factors controlling liver regeneration will find in the excellent first chapter that the origin of fibroblasts is still disputed and the reasons for the contraction of wounds are still poorly understood. The author's conclusion that contraction probably has a cellular basis and that fibroblasts are in some way responsible is a return to square one. This indication of slow progress to understanding, in spite of the numerous experimental approaches, can be found in many places; for example, the origin of myoblasts in chapter three, and the still unsolved problem of the factors controlling liver regeneration in detail. The critical discussion of such problems is an undoubted merit of the book.

The chapter on bone is stimulating and simple; that on nerve covers most of the classical work on the subject, but surprisingly omits any reference to segmental demyelination. Biochemical aspects of the problems are

not discussed in any detail, although references are given to reviews. This is perhaps wise if the volume was to be a moderate size, but it is surprising that there is little or no mention of the relevance of immunology to repair and regeneration. References to grafting are to autographs from a descriptive angle and the modification of the reactions in homografts is hardly discussed. The changes in gastric mucosa in pernicious anaemia are described, but the fact that these lesions result from an auto-immune reaction is not mentioned.

The consideration of repair as seen in human disease is somewhat summary and the pathologist will be disappointed with the phrase "a discussion of the complexities of human liver pathology is not called for here", for it is in such complexities that fundamental questions are raised. The merit of the work that is presented makes one wish that the author had used his wide experience to define such fundamental questions from his angle. This would mean a longer book or a sequel—the contribution of Julian Huxley when he took a look at the problem of cancer comes to mind.

Autoradiographic and electromicroscopical as well as some histochemical observations are referred to in many sections, but one would welcome more of these as well as more discussion of their limitation. Pelc's (1965) cautionary warning about the significance of DNA labelling with tritiated thymidine is referred to, but this method is used so frequently in experimental investigations that it should have been critically discussed.

Nevertheless, the book as a whole is very valuable, and the exposition is simple and clear. If I am like Oliver asking for more, it is not because there has been no J. F. SMITH

FISHES WHICH GROPE IN THE DARK

L'Evolution Régressive des Poissons Cavernicoles et Abyssaux

By Georges Thinès. Pp. 394. (Masson et Cie: Paris, 1969.) 95 francs.

SYSTEMATISTS, geneticists, physiologists, ethologists and ecologists do not often become closely involved in each others' work. One promising exception is through the study of cave faunas, which are relatively simple in nature. Though there is much to be learned of subterranean space and its life, certain cave systems, particularly in Africa and America, have now been well explored from geological, hydrological and biological points of view. Interpretation of these findings has not only stimulated the foregoing specialists, but also been a challenge to evolutionary biologists.

The present work is concerned largely with cave dwelling fishes. Professor Thinès, who has worked in African caves and studied the behaviour of cave fishes for the past fifteen years, makes full use of his special skills, and they are literary as well as scientific. Like other cave biologists, his study of regressed visual and pigmentary systems has led him to compare and contrast such structures with those in deep sea fishes that live below the threshold of light. Moreover, there are blind fishes in littoral and brackish waters, which are also considered.

More than half of this well planned book is devoted to a systematic review. Under each species is given its synonymy, a general description and, wherever possible, full consideration of its regressed features, habits and habitat. There are many illustrations. We learn that ninety-five species of blind fishes are known at present, forty-four from fresh waters, thirty-two from marine waters and nineteen from brackish waters. The best studied freshwater species are the characid, *Anoptichthys jordani*, the cyprinids *Caecobarbus geertsi* and *Typhlogarra widdowsoni*, and the amblyopsids. Of the deep sea, bottom