

Book Reviews

of motifs from pagan healing cults by the Christians, and it is good to have a further archaeological demonstration of the same point. This rivalry may go some way to explain the total destruction at Pergamum of all artistic representations of Asclepius of Pergamum, for which we have to rely on statues and coins from Thrace and the Black Sea region and on the late testimony of an Arabic scholar who knew his Galen, see G. Strohmaier, *Festschrift Franz Altheim*, 1970, pp. 143–153. Dinkler rightly notes the long survival of non-Christian healing shrines into the fifth century: in Britain the shrine of Nodens at Lydney was built in the last third of the fourth century, and its great days extended well into the fifth, long after the adoption of Christianity as the official state religion.

Vivian Nutton
The Wellcome Institute

HENK J. KLASSEN, *History of free skin grafting. Knowledge or empiricism?*, Berlin, Heidelberg, and New York, Springer-Verlag, 1981, 8vo, pp. xii, 190, illus., DM. 70.00/\$35.50.

Surgeons have always been interested in ways of speeding the healing of large open wounds. But it was not until 1869 that Reverdin, a Swiss surgeon working in Paris, discovered how to transplant small pieces of skin which had been completely detached from the donor site. This is “free skin grafting”, which is one of the main principles of plastic and reconstructive surgery today. Klasen has written the first book to be devoted solely to this method of skin grafting, and he has given a detailed account, with an excellent bibliography, of its development from the middle of the nineteenth century up to 1950, concluding that “every step . . . has been based on empiricism”.

Klasen mentions Zeis, who produced the first history of plastic surgery in 1863, but omits Zeis’s references to the re-union of completely detached parts, and the fact that this union was considered to be the physiological basis of the successful “take” of the pedicled-flap grafts which were then so popular. Hoffacker (1828) had unrivalled experience of the injuries sustained by the duelling students in Heidelberg, and gave clear reports of successful re-union of amputated parts of the face. Klasen also omits the work of Baronio (1804) on free grafting in animals, and Hooke’s experiments (1663–64) in the early years of the Royal Society. There is no index.

“Free-grafting” is only one method of transplanting skin. “Pedicled-flaps” have a much longer history, but Klasen does not mention their relation to “free grafts” and the varying popularity of each at different times; the rival claims of these methods were not resolved until the First World War. This book is primarily for surgeons, who will know how these methods of grafting complement each other.

T. J. S. Patterson
Wellcome Unit for the History of Medicine
University of Oxford

FRANÇOIS JACOB, *The possible and the actual*, Seattle and London, University of Washington Press, 1982, 8vo, pp. viii, 71, £6.30.

It is nearly always interesting to read how a great scientist regards the general philosophical and moral problems raised by his subject, especially if he belongs to a culture rather different from one’s own. We may be close to France geographically, but anyone who tries to follow existentialist philosophy may feel that we are many miles apart. It is pleasant, therefore, to find that François Jacob thinks very much as we Anglo-Americans do, with great humanity but hints of romantic idealism. He is certainly one of the greatest molecular biologists, and he also has an excellent grasp of most of the major problems of biology in general and of medicine. In these sixty-nine pages are words of wisdom on many of the intellectual, social, and political problems raised by science.

It is all done with a light touch and much good historical sense. He begins with “Why two sexes rather than three?” and so to some classical allusions and to the question of how “myths

and science fulfil similar functions". As he says, "The human brain needs to have a representation of the world that is unified and coherent." In his discussion of evolution Jacob is an out-and-out Darwinian, but gives a good analysis of the problems raised by molecular biology. He contrasts the selectionist Darwinian model with the instructionist theories of creationists. As an immunologist, he is rightly convinced of the ubiquity of selection among natural phenomena. He refers to the possibility that learning in the brain depends on selection, but he has not caught up with the evidence that some of us have provided about this.

He makes an interesting comparison between the muscle *Tabulae* of Vesalius, revealing the layers of the body, and molecular anatomy showing a hierarchy of structure. He is not afraid to expose the weakness of his subject, for instance the "only logic that biologists really master is one-dimensional. As soon as a second dimension is added, not to mention a third one, biologists are no longer at ease". For this reason, they do not like to abandon their current type of analysis to study developmental problems. If he has a weakness it is in the understanding of "lower animals". Fishes, for instance, are not so dependent on "innate releasing mechanisms" as he suggests.

In his final section on 'Time and the invention of the future', Jacob has many wise things to say about such subjects as senescence, intelligence testing, and cultural development in general. He considers that "mind is a product of brain organisation in the same way that life is a product of molecular organisation", but is not afraid to admit that "Any history of the brain and of the mind remains, therefore, merely a story, a scenario". This is evidently not a very profound philosophical position, but it shows the humble wisdom that is typical of the book.

J. Z. Young
Wellcome Institute

RONALD GIBSON, *The family doctor, his life and history*, London, Allen & Unwin, 1982, 8vo, pp. xv, 214, illus., £9.50.

The changes that have occurred in general practice since the National Health Service was introduced have been far greater than in any comparable period in the past. Yet, to anyone unfamiliar with primary care, it may seem surprising that the Ministry of Health (and its successor, the Department of Health and Social Security) has played little part in the initiation of these changes. This is not necessarily a condemnation of the Ministry: indeed, in part it is an inevitable consequence of the independent-contractor status of the general medical services, and in part, it was due to the realization by the Ministry that attempts to impose change from the centre, however benign or worthy they seemed, would often provoke opposition born of profound mistrust of their source. Such improvements as have occurred in general practice – and they are many – have almost always been due to a relatively small group of general practitioners, many of whom (like the author of this book) were already established in practice before the NHS began. They all had two things in common: a firm belief in general practice as an essential part of clinical medicine (which they sustained through the 1950s and early '60s when it looked as if general practice might die out), and second, the energy to carry out the much-needed reforms while engaged in practice during a period when the volume of work could seem overwhelming. These practitioners – the reformers – divided into two distinct groups. One group became the founders of the Royal College of General Practitioners, which remained resolutely apolitical and academic, dedicated to the improvement of general practice through education and research. The other plunged into the rougher world of medical politics, either through the Local Medical Committees or the British Medical Association, or quite often both, since the two converged in the joint shared committee, the General Medical Services Committee. This medico-political group contributed to the advancement of general practice through improved pay and conditions of service. At the "official" or committee level, the RCGP and the GMSC to all intents and purposes acted independently. Occasionally, you could even hear a faint but distinct growl if they sighted each other. One suspects that they tended to attract practitioners of different temperament, although there were, and are, individuals who played a significant part in both. Sir Ronald Gibson was one of the first to become involved in post-graduate education in general practice, but his outstanding contribution was in the field of