

application to man would indicate that recidivism and compulsive behaviour result from frustration and this explains their intractability to punishment and recognised treatment respectively. He enlarges the matter further but does not point out that it is incompatible with the doctrine of freewill, a philosophical consequence of some importance. It is particularly in the latter part of the book that he develops the implications and applications of his theory. He suggests that there may be conflict between goal-motivated and frustration-instigated behaviour as well as between two choice situations. He applies his theory well to child management, though it must be admitted that nothing startling emerges in the final result.

These researches are refreshing in their interest and originality, and even if they should be disproved Prof. Maier has given us a novel and stimulating view of our daily problems.

E. S. STERN.

Cell Growth and Cell Function. By Professor TORBJOERN O. CASPERSSON. New York: W. W. Norton & Co., Inc. London: Chapman & Hall. Pp. 185. Figs. 91. 28s.

For twenty years the author and his school have studied the biochemistry of the intact cell, using chiefly the methods of ultraviolet spectrography applied to the microscopic image. By using a variety of wavelengths for the photomicrography, and by comparing the observed absorptions with those of known substances, he has been able to deduce with some confidence the chemical nature of many important cellular constituents. A picture can thus be built up showing not only the global quantities but also the naturally occurring gradients of concentration. In his Salmon Lectures the author summarized his work, and this book presents his results in expanded form.

It can certainly be recommended. Profusely illustrated and well bound, it contains much information that will interest the biochemist and histologist. The psychiatrist, too, will be interested, for Caspersson studied the nerve cell and found, rather to his surprise, that it is remarkably active in protein synthesis, being at times inferior in activity only to the developing ovum. Why this should be is still unknown, though there is evidence that the synthesis plays an important part in normal neuron function. It was the idea that this synthesis might be faulty in schizophrenia that first led his colleagues Hyden and Hartelius to treat this condition with malononitrile.

W. ROSS ASHBY.

Pavlov: A Biography. By B. P. BABKIN. London: Victor Gollancz, Ltd., 1951. Pp. 365. 25s.

Professor Babkin, who died just before the book was published, was a pupil of Pavlov's at the Institute of Experimental Medicine and worked with him for over ten years. The two became close friends and remained so throughout their lives, though they had to separate eventually when Babkin went to Canada. Here Babkin wrote the book, and though the location made some Russian material and information unavailable, it left the author free from any suggestion of political pressure. As a Russian, a lifelong friend, and a professional physiologist, the author was obviously well qualified for the task.

The resulting book is excellent. It is written in good English and is rich in facts. It reveals Pavlov's genius, yet is by no means blindly hero-worshipping. All those who have been thrilled by Pavlov's discoveries will want to know something of the man himself: Babkin's book will give the information they want.

W. ROSS ASHBY.