and the perivascular spaces; the same cells are found in each and appear to pass freely from one to the other. In this he differs from Alzheimer, who taught that cells of neuroglial origin did not pass into the Virchow-Robin space, but broke down and deposited their inclusions in the perivascular space of His.

Somewhat confusing also is his insistence on the teaching of Dominici that the mesodermal cells of the vessel wall can by metaplasia give rise to such forms of mononuclear wandering cell as the lymphocyte, mast-cell and plasma-cell. From this he deduces that whatever be the nature of the process which stimulates the mesodermal cells the result is the same with but slight variations. He considers that it is impossible to tell from the appearance of a perivascular infiltration whether it is due to microbial invasion of the brain substance or to toxic or even Wallerian degeneration of the nerve cells or fibres. In support of this he mentions three cases of hemiplegia due to cortical softening in which he found in the degenerated pyramidal tract in the cord "a perivascular lymphocytic infiltration as intense as those of epidemic encephalitis." The theory that the cells filling the perivascular lymphatics arise in situ by metaplasia of the cells lining these spaces, conflicts somewhat with the well-known doctrine that the Virchow-Robin space acts as a sewage system which carries the scavenging cells towards the meninges. But he finds no difficulty in reconciling these views; for, as he says, in acute processes, whether inflammatory or destructive, the formative or metaplastic activity of the adventitial cells is predominant, whereas in more chronic processes it is in abeyance. It seems to us that the contrast presented by subacute combined degeneration, in which the adventitial spaces are filled with scavenger cells, and the much more chronic syphilitic diseases, with their widespread perivascular mononuclear infiltration, is altogether hostile to this conception.

For him, too, there is no distinction between poliomyelitis, rabies and Landry's paralysis. In all "the affection of the anterior cornual cells is primary. These cells degenerate and become surrounded by various neuroglial and neogonial cells." The subject is dismissed shortly, and we are left with the idea that the intense infiltration of the anterior horns in poliomyelitis derives none of its cells from the blood.

Altogether the book is just a little disappointing. It is too diffuse to be a monograph, and too incomplete to be a text-book or work of reference. There are many misprints, some of which, such as 'aurphil' for 'azurophil' in the first chapter, are misleading. The bibliography occupies ten pages, but contains only four references to English and American writers. The index is short but fairly complete.

J. G. Greenfield.


This excellent monograph comes from the Clinic for Nervous Diseases and Institute of Pathology of the Royal University of Sassari. It is illustrated
REVIEWS AND NOTICES OF BOOKS

with a large number of clinical and pathological photographs, and contains a bibliography with many hundreds of references.

Some 200 pages are devoted to the psychological, neurological, and viscerosympathetic sequelae of the disease, and contain many data of interest. Dr. La Torre also goes with some minuteness into the vexed questions of the pathogenesis of Parkinsonism and of involuntary movements, without, however, reaching any very definite conclusions.

As a remarkably complete review of our knowledge on an important, difficult, and serious disease, this monograph may be cordially recommended to the notice of the neurologist.


This thesis for the Doctorate is of interest to psychiatrist and neuropathologist alike. The anatomo-pathological processes of senility—vessel changes, cell lesions, alterations in nerve fibres and neuroglia, amyloid bodies and senile plaques—are all discussed at length. Certain pathological complications—lacunes of disintegration, changes consecutive to vascular degeneration, perivascular gliosis, 'Rindenverödung,' the 'subcortical encephalitis' of Binswanger, Pick's atrophy—are similarly investigated and illustrated with personal material.

Dr. Frigerio comes to the conclusion that the anatomo-pathological accompaniments of physiological involution of the nervous system are definitely known, whereas those associated with senile psychoses possess no characteristic or pathognomonic feature. The senile 'plaques' are essentially the expression of the age of the patient; they are to be found in normal subjects, being identical in number, type, and localisation with those seen in senile dementia. They cannot be regarded as a genuinely pathological condition, in the sense that psychical symptoms can be attributed to their presence. The author distinguishes two varieties only of senile psychosis—simple dementia and arteriosclerotic dementia, though he admits the difficulty of separating them clinically; from the anatomo-pathological point of view this is more difficult still. Alzheimer's disease is merely a precocious senility, or, rather, is due to the premature appearance of certain features of senile involution; the reason for this is obscure.


This volume sets out the theory developed from previous research on the psychology of day-dreams. The author regards memory as the basis supporting the whole edifice of the mind, and perception and conception as a resynthesis after dissociation of memories. He distinguishes between reduplicative and synthetic memory. The former is merely a restoration of events which happened in the past without conscious selection or guidance.
Many somnambulisms and dissociated states are examples of this. This type of remembering also occurs under normal conditions, but generally involves a temporary absence of full conscious control and is not called up by conscious effort. It may, however, be used deliberately when the other form of synthetic memory fails and a name or an event cannot be recalled at will. He claims that those cases of extremely accurate visual imagery which enables an orator to read off the sheets of his MS. in his mind's eye are examples of the employment of this type of memory. The same process is used in an abridged form when we are enabled to decide on a course of action from the dictates of past experience; we recognise a causal influence and are enabled to anticipate the result. It would seem that animals also enjoy reduplicative memory and are capable of the psychic processes involved in this enjoyment. In other words, reduplicative memory is a primitive function, both of the individual and of the race.

The next chapter deals with synthetic memory and its relation to perception; by synthetic memory the author refers to the recalled material which is selected in connection with received sensation, it may be with little or no temporal or spatial relationship. This selection need not be conscious and deliberate, and if it is not it will be found to be determined by unconscious affective impulses.

It is the selected images which give meaning to a sensation and so give rise to a perception, and it follows that this meaning may be largely determined by our sentiments and wishes. The varieties of syntheses are, as a rule, limited and more or less stereotyped, but now and then originality occurs, generally by the shifting of accent from one element in the synthesis to another.

When synthetic memory fails to recall what we want we frequently make use of reduplicative memory and reach our goal by the longer way round. Both forms tend to arise spontaneously and to evoke useful or pleasant images. There is active at the same time an inhibitive tendency, preventing unpleasant or useless images from entering consciousness. The reduplicative memory recapitulates everything, whether of significance to the ego or not, while synthetic memory is essentially egocentric, and by means of perception helps to establish the discriminated relationship between the ego and the environment essential to the higher levels of mental function.

Conception is next dealt with, and the author maintains that thought involves a planning towards some object for the benefit of the ego. This may be conscious or unconscious, and involves synthesis of mnemic elements derived from the synthetic memory in the absence of any real object. In the process of conception we review our past experiences and pick out those which will help us to make the adaptation at present demanded of us. For this purpose, although mnemic elements are derived from the synthetic memory, the reduplicative memory may be called in to test the value of any such element. The same sort of processes and the same material are involved, both in perception and conception, but whereas a perception enriches the mind with a new image, conception enriches it with a new relation. This relation is between old elements and is itself old, i.e., not original. Invention
involves the discovery of a new similarity or relation between elements. The brevity and suddenness often attributed to invention are probably less essential than they appear to be, for much work may go on at unconscious levels before the new synthesis emerges in consciousness. Invention, like other syntheses, is mostly determined by affects and wishes and not by conscious deliberation.

Unconscious movements are next discussed and several examples quoted. It is noted that mental excitations reaching the level of consciousness do not tend to invade the motor system so as to produce automatic actions, the latter usually being the products of affective wishes. The author points out the biological utility of movement becoming automatic (the psychic element being repressed), and goes on to substantiate the theory that thought and movement are closely associated, if not identical, inasmuch as the bodily aspect as opposed to the mental aspect of thought is a set towards muscular action, the latter being less evident the more word symbols are brought into play. The more such mental activity achieves the level of consciousness the more is movement repressed, but where this level is not achieved, repression is no longer active and automatic involuntary movements tend to occur.

Under certain circumstances the reduplicative motor memory proves of use in leaving the mind free for other conscious purposes, but under other circumstances it has to be repressed so as to interrupt thought processes.

Finally, the author discusses consciousness. He admits the difficulties, and commences by an attempt to analyse consciousness in animals. He thinks that this state or function intervenes when the automatic reactions fail to achieve adaptation and when the necessity of choice arises. This makes reduplicative memory unavailing and calls for synthetic memory. Further, consciousness seems to last just so long as a desire is unsatisfied, which is strong enough to persist if it meets with opposition. Such a process is discontinuous in animals, but becomes more or less continuous in man. He discusses what awakens consciousness, and concludes that such awakening comes at the moment of choice as an alternative to the setting up of automatic movements. The function of consciousness is, therefore, to achieve adaptation to external circumstances, to meet which the automatic muscular activities are not adequate. In man desires are so abundant that there are but few moments in the course of a day when sensations of objects come to him without arousing immediately a corresponding wish, which involves the awakening of consciousness. It is not necessary that he should be aware of this wish to adaptation. Moreover, in man the wish is apt to be organized into the will. This latter term comprises a certitude in the ultimate goal which is absent from the wish and involves an organization of similar wishes reinforced by selected mnemic images and an inhibition of opposing wishes. This organization into will results in a maintenance of the end in view and a continuity of interest in the surroundings. In the evolution of man’s mental equipment four successive stages may be recognized which are all fused together in the human being: (1) unconsciousness; (2) foreconsciousness, both of which coexist from origin; (3) outer awareness or consciousness,
occasionally present in animals; (4) self-consciousness or awareness, only reaching its full development in man.

The book is of considerable interest and importance, bringing evolutionary and biological conceptions to bear on the more difficult problems of psychology. Such an approach is of great service at present, when a correlation is being attempted between the neuroses and the psychoses. Nevertheless, it cannot be said that the work is easy reading. To write in a language not one’s own is a task of almost insurmountable difficulty, and it is inevitable that some of the passages should be involved and obscure. This, combined with a certain inexactitude of thought on the author’s part when discussing the more physiological aspects of the subject, renders the book difficult to follow in detail without very close study, but the general argument is clear enough and decidedly helpful in formulating an idea of mental evolution.

R. G. G.


The more psychoanalysis is studied, the more it tends to throw light upon manifold problems of human thought and conduct, and there is every reason to believe that there will be an ever-widening sphere in this direction. It is obvious that only a profound student of psychoanalysis, whose collateral knowledge must be extensive, is justified in undertaking such a field of inquiry. In Dr. Ernest Jones we have a writer whose erudition and experience is such that we may be certain that any contribution he may make will be of value. These essays, now presented in book form, were previously published in various journals, mostly in German, but have here been revised and largely rewritten. In the thirteen chapters we have such varying parts of the subject touched on as: political psychology, artistic and literary creation, national and individual characterology, the study of superstition, religion, and folklore. The pages are pregnant with interest from cover to cover, and no difference of agreement with any of the author’s deductions can lessen the fascination which the intelligent reader must feel. The usual excellent literary style adds to the value of a volume which we are assured will be widely welcomed.

C. Stanford Read.