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This symposium includes 18 prepared contributions each followed by a condensed discussion, together with a final general discussion on the subject as a whole. Greater emphasis has been laid on prepared papers than was the case with other symposia previously published, and the result is to make the volume heavier to read but possibly more valuable in the amount of reliable information that it conveys. The authors include many of the best known contributors to the neurophysiological field pertaining to the diffuse projection system which has received so much attention in recent years, e.g., Morison, Lashley, Jasper, Magoun, Bremer, Hess, Moruzzi, and others. The British contributors are Adrian and Grey Walter.

The main argument is well propounded by Fessard who suggests that the phenomena of consciousness are those of an “experienced integration” of nerve impulses. The three possible loci for such a function are the brain as a whole, the cortex as a whole, and lastly one specific part of the brain which can receive abstracted information from other parts of the brain which participate in its passage only in the form of unconscious operations. At this point Fessard goes to the reticular structures of the diencephalon and brain-stem to find one possible integrating structure. Such a descent finds favour with Penfield, who has long pressed for a “centencephalon” on philosophical grounds. Reasons cited for the recourse to the brain-stem, which Penfield calls the highest centre, include the work of Magoun showing that the reticulum of the midbrain is necessary for consciousness, and that of Lashley which showed that isolation of portions of sensory or sensorimotor cortex from all but centrally passing fibres did not destroy perceptive or learning abilities in animals. These authors (Magoun and Lashley) regard this interpretation of their own work with considerable caution, and even, it seems, almost with embarrassment. Indeed, Lashley states flatly that the reticular substance may act as an activating agent or “pace setter” for the cerebral cortex, but this is certainly all that can be claimed for it at present.

One weakness in the meeting is in the paucity of references to temperamental disturbances in experimental animals. One of the few studies cited is that of MacLean, whose suggestion of a specifically afferented hippocampus as part of his “visceral brain” has already been subjected to considerable criticism in the literature. If, as seems likely, temporal lobe cortex is involved in affective states, and if the hippocampus and fornix, or other diencephalic connexions, are capable of influencing the rest of the cortex as Lashley suggests as a “pace setter”, then the evidence presented in this volume would seem to point towards the associative area in the tempo-parietal lobe of the dominant hemisphere as fulfilling most of the criteria demanded by Fessard. The implication seems to be that by such means the abstracting “secondary integrative level” of, say, the frontal lobes could be switched in and out like the frequency analyzers of the E.E.G. machine, with emotional considerations “controlling the switch”. These ideas are not new. Herrick suggested something of the sort for the function of the rhinencephalon in 1933.

Whether all this be reasonable surmise or not, the reader will almost certainly be encouraged to formulate some synthesis for himself after reading this symposium. Other chapters include one on anaesthesia by Mary Brazier which shows how profound is our ignorance of the essential mode of action of the commonest drugs.

Moruzzi describes how cerebellar stimulation affects the reticular substance of the brain-stem, but there is considerable doubt in the minds of the others whether it was the ascending or descending reticular substance. Final doubt is also left about the upward prolongation of the ascending reticular substance. Similar effects were found on stimulation of subthalamic structures, but the diffuse non-specific projection through the thalamus, although it produced widespread changes in the cortical E.E.G. patterns, might not arouse the animal. Elkes and Bradley in this country have found a similar dissociation following the use of certain drugs. Indeed Hess claims that stimulation of the thalamic non-specific projection system actually caused sleep which lasted for a long time after the stimulus ceased. However he was using “stimulus” waves lasting 1/80 sec. (12-5 m.sec.) 8 per second, and in the opinion of some workers, this duration and frequency may produce effects opposite to those of stimulation.

One further point is left in doubt. It would seem that some of the synchrony between the two hemispheres occurs independently of the known commissures, and may be mediated through brain-stem structures. How this occurs remains a mystery, though it seems unlikely that it represents any form of point-to-point projection such as is mediated through the corpus callosum, and possibly the anterior commissure.

Grey Walter describes his toposcope and his conditioned reflex analogue, while Adrian’s chapter on the physiological basis of olfactory perception is a model of lucidity.

This book should be read by everyone interested in the brain, and it should be read soon before the ever-
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increasing volume of new work on these subjects renders it already out of date.


"Neurology, a branch of medicine which for many years has been traditionally allied with psychiatry, has in recent years returned more closely to the fold of internal medicine."

With these words Dr. Houston Merritt introduces the reader to this excellent new textbook. In order to conserve space the traditional sections on anatomy and methods of examination have been omitted, and the author has also refrained from writing about the psychoneuroses. Discussions with regard to abstruse neurological problems are avoided.

On the other hand, the author presents a well-expressed, matter-of-fact and up-to-date account of existing knowledge which is profusely illustrated by his own clinical experience. The problems of treatment are handled well, and the reader throughout has the feeling that the author is only recommending methods which he has himself found useful.

The author is keenly interested in the biochemical study of diseases which have been labelled as degenerative or heredo-degenerative, and the new American school of neurology which he is helping to lead may be expected to go from strength to strength as biochemical knowledge develops.

This is perhaps the most useful textbook of neurology written in recent years, and will be specially helpful to British physicians and neurologists for the clear account of Dr. Merritt's experience which they can use to supplement the information to be found in British textbooks.


Dr. Kinnier Wilson's Neurology was incomplete at the time of his untimely death, and was published in 1940 in an incomplete form under the editorship of Dr. Ninian Bruce. In this second edition a noteworthy attempt to fill the gaps in the first edition is provided by an excellent chapter by Sir Russell Brain on aphasia, apraxia, and agnosia.

Apart from this important addition, however, the second edition is to a great extent a reprinting of the first edition, while as the editor writes "endeavour has been made to include summaries of the more important neurological advances together with the corresponding references without in any way interfering with the general character of the book". The result is in many respects unfortunate, for it is impossible to bring a section up to date by simply adding a paragraph to what was written nearly 20 years ago; it would surely have been better just to reprint the first edition which contains many fine sections which all are glad to refer to from time to time.

Thus we still read on page 20 that the course of leptomenigitis is "an acute beginning ... as a rule followed in turn by depression and paralysis ... inanition hastens death", though treatment with sulphonamides is described a few pages later. On page 84 no attempt has been made to make the discussion of post-exanthematous encephalopathies up to date. Such comments may be made with regard to so many sections in the book that one can only conclude that the editor intended this to be a reprint of the first edition but was persuaded to add a little to each section to enable it to be called a second edition. Thus the long lists of references are concerned almost entirely with papers written before 1940.

What Dr. Kinnier Wilson would have thought of all this is doubtful, for no one was more anxious to be ahead of current thought on neurological problems.


This book is evidently popular with students and practitioners, as this is the eighth edition to appear since its first publication in 1940. It deserves the wide audience it will continue to have. It is reminiscent in some ways of Lewis's Diseases of the Heart: both are relatively small books for their subject, both may give at first glance a misleading impression of omitting more than a little relevant matter, but in each instance when their views are sought on some particular aspect they will rarely be found to fail in mentioning the relevant facts together with their reasoned interpretation. Diagnosis in neurology lends itself more than in many branches of medicine to a division into site and type of disease process. The author has made use of this in providing a first part to his book on general principles of neurological diagnosis, while in the second and major part a descriptive account of the more common diseases of the nervous system is given. Two minor points of criticism may be mentioned amid the general excellence of the work.

In acute infections of the nervous system pneumococcal meningitis is hardly treated with the urgency it deserves. After a diagnostic lumbar puncture, and sometimes before this on the clinical history alone, the immediate intrathecal injection of antibiotic may be a necessary life-saving procedure. As for epilepsy, there may not be "a hystero-epilepsy", but hysterical patients may have epileptic fits and epileptic patients may be hysterical or otherwise psychiatrically disturbed. Further to confound the doctor in search of a diagnosis, the electroencephalogram may at times show abnormalities which have heretofore been considered "epileptic" in patients not known to have had unequivocal epileptic attacks, but with clear psychiatric abnormalities. The problem may be more difficult than the author here seems to imply. Apart from its matter, the manner of the book is also to be recommended. The author's well known controversialism is here mellowed into an occasional pungency of phrase by which the point is well taken. If his mastery of language occasionally obscures the
weakness of an argument, this is rarely apparent in the present work. A good wine needs no bush, but neurologists as well as students and practitioners will find this a pleasing and useful résumé of their subject.


The appearance of this encyclopaedic work is an important occasion and reflects the resurgence of clinical neurology in the U.S.A. There are 65 contributors, and many of the chapters give an excellent account of current knowledge. Some repetition is inevitable, and omissions can always be found in such a compilation. As an example, one may refer to the 70 pages devoted to ophthalmological diagnostic methods. Here many diseases are referred to at length while some well-known neurological phenomena are neglected, such as the internuclear ocular palsies, defects of attention and localization in the visual fields, and the characteristic perimetric findings in wounds of the calcarine cortex. Other conditions which find scant attention are Wernicke's encephalopathy and the neuropathies associated with bronchial carcinoma.

Perhaps the most serious general criticism of this work, however, is the neglect of many of the wider aspects of treatment. This is traditional to many neurological textbooks in the past, but is hardly appropriate to modern expectations. Thus the treatment of epilepsy described refers to anticonvulsants and surgery, but neglects the all-important handling of the patient and planning of his life. Similarly, in the handling of the chronic case of disseminated sclerosis the reader will get no help from this work. No wonder the special associations for various diseases find there is so much for them to do! There is a chapter on 'Neurologic Rehabilitation,' which is excellent as far as it goes, but does not adequately fill the general lack of interest in the wider aspects of treatment. The recommended treatment for recovering head injuries (page 1004) will read strangely to British neurologists who have adopted the much more positive attitude towards rehabilitation developed by the war-time head injury centres.

However, it is not only in the U.S.A. that neurologists neglect the treatment of their patients, and in other regards this important publication will be much referred to by neurologists. Dr. A. B. Baker is to be congratulated on the publication of these volumes.


This tenth edition of a well established book continues to give a very full and satisfactory account of the routine examination of the nervous system. The autonomic system is treated more fully than is usual in this country, and pharmacological tests that can be usefully employed are given.

A modified Binet-Simon test for intelligence is included, although this is now generally outmoded, while simple tests that are commonly used for orientation, awareness, memory, are not mentioned.

It is doubtful if neuroradiology should now be contained within a volume on the examination of the nervous system, though the 70-odd pages devoted to it certainly contain useful information. In later editions it might be worth pruning some of the material which is now largely of historical interest to make room for fuller treatment of electrical diagnosis, and for the methods of examining the interesting syndromes of the posterior parietal lobe.


This book on visual fields will be widely welcomed, for recent books on this subject are few, and it is especially valuable to have a book written from the neurologist's viewpoint. It is explicitly a statement of the author's personal views and experience, and though references are given at the end of each chapter no attempt is made to survey the literature extensively. The visual fields illustrated, of which there are an admirably large number, are well chosen and have all been charted by the author in person. After describing his technique of quantitative perimetry the author describes first the anatomy of the visual pathways and then the way in which various pathological states affect them.

The fast-moving missiles of modern war can inflict well localized injury to the brain which more closely simulates experimental lesions in an animal than any other type of human pathology. It is therefore surprising that Mr. Hughes does not make use of this valuable material, and it is partly for this reason that his account of the visual radiations and the striate cortex lacks the detail and clarity with which the more anterior visual pathways are described.

The book is refreshingly slim, but in some instances more clinical details would be acceptable. Fig. 65, for instance, shows a visual field attributed to thrombosis of the posterior calcarine artery supplying the depths of the sulcus. The type of field defect shown is rare but has been reported in a lesion of the anterior part of the radiation. The reader is curious to know how the site of this small vascular accident was determined, and his curiosity is increased when he finds the same figure subsequently referred to (p. 142) as due to a lesion of the radiations.


This is an interesting and thoughtful book. Professor Lassek here reviews the anatomical, physiological, and clinical facts that have been accumulated about the pyramidal tract mainly during the past century; though he also mentions earlier views put forward since the French physician, Petit, in 1710 clearly demonstrated the pyramidal decussation in the medulla. The author is well qualified for his task, as he has been contributing to our knowledge of this subject for over 25 years, and
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it was he who originally showed by cell and fibre counts that the giant pyramidal cells so prominent in the fifth layer of the motor cortex could account for only a small proportion of the fibres in the medullary pyramid. Although the Betz cells are still held to be largely responsible for the excitatory properties of the motor area, and injury limited to the pyramidal tracts produces retrograde degeneration almost exclusively in these cells, nevertheless the fibre components of the tract are almost thirty times more numerous than the Betz cells and are mostly of much smaller diameter than fibres known to be derived from these cells. Moreover, many cases of cerebral palsy show little or no neuronal loss in this tract. There is still a tendency in clinical neurology to emphasize the origin of the tract in the motor area and to imply that this is its main source. Such a view is not supported by the evidence, and indeed earlier workers, such as Ferrier, investigating representation of movement, clearly believed that the pyramidal tract derived from both post- and pre-central gyri. The author's own view is that pyramidal neurons should be regarded as inter-nuncial in function, in which he claims the support of Sherrington. Incidentally, in discussing Babinski's sign he points out the wealth of evidence that it can at times occur in the absence of any pyramidal fibre destruction and casts doubt on its clinical value as a pathognomonic finding. He believes that from the broad viewpoint the function of this tract, so far from being clearly understood, "constitutes an enigmatic and challenging pathway". Although the assessment of clinical findings is at times uncritical, the facts put forward and the wider views on the anatomical background of motor behaviour are interesting and salutary for the practising neurologist.


This book describes the clinical and pathological features of chromophobe adenoma of the pituitary, and special attention is paid to those aspects which impinge on general medicine, particularly the disorders of endocrine function. The anatomy and physiology of the hypophysis and of the sella and perisellar region are reviewed. The authors describe 117 cases with neurological, endocrinological, and other investigations, and outline the therapeutic approach suggested by their experience. The book is dedicated to "the rapprochement of neurology to general medicine", and clearly endocrinologists and neurologists might fruitfully cooperate in this field.

The authors recommend x-ray treatment and consider surgery should mainly be employed when radiotherapy fails. At first a course totalling 2,400 r was given, but now a course of 3,000 r is recommended and many European authorities would be more ready to accept this suggestion if it was certain that late radiation necrosis did not occur. Unfortunately it is not easy to discover how long the authors' cases have been followed.


Those who have had to treat poliomyelitis in the acute stage will appreciate how much the experienced nurse contributes not only to the comfort and functional recovery of the patient but also to the preservation of life. The incidence of poliomyelitis is so variable both in time and place that, except in a very few centres, it is impossible to maintain a fully experienced nursing staff constantly in being. This small book is well written and incorporates the practical lessons learned by the authors in treating acute poliomyelitis in England and the United States. It deals clearly, amongst other things, with the technique of artificial respiration in tank respirators and by intermittent positive pressure, the value and methods of passive movements to the limbs, and the use and abuse of hot packs.


This book consists chiefly of a review of world literature regarding neurotropic viruses and their epidemiological behaviour. There is special reference to the recent literature regarding poliomyelitis.


These papers were presented in October, 1954, and contain many important reports on the present-day knowledge of the chemistry, physiology, and pharmacology of muscle in health and disease.


This booklet is a collection of papers and discussions by various authors given at a surgical meeting in 1954 and is concerned with the clinical syndromes resulting from or associated with cervical spondylosis or, as it is also called, cervical osteochondrosis. The book reveals not only the complexity of the problem but also the confusion which still exists among the authors regarding its analysis and interpretation. There is a tendency on the part of the majority of the authors to turn away from the conception of mechanical compression of the spinal root by the bony alterations as the main or even the only cause of the irritative symptoms. The following, more comprehensive, papers need special mention:—

Kuhlendahl and others discuss those cases of cervical spondylosis associated with spinal cord symptoms. The involvement of the pyramidal tract and a more or less marked damage of the spino-thalamic tracts, were the predominant symptoms, while posterior column symptoms were rare. The authors accept the view that circulatory disturbances in the distribution of the
anterior spinal artery, due to compression by disc protrusions, cause the myelopathy.

The authors consider the spinal cord changes as irreversible, but they believe that further progression can be prevented by the operation. Tonnis and Krenek report their experience with surgical treatment in 61 cases, between 1951 and 1954. The authors distinguish osteochondrosis, in which the operation was successful in only 26-5% cases, from lateral prolapsed intervertebral disc with 50% good results and medial prolapsed intervertebral disc with only 20% good results. They consider that immediate operation is indicated for the medial prolapsed intervertebral disc, but they also advise operation for the other two groups, if conservative treatment has proved unsuccessful.

In contrast to these authors, Reischauer, the editor of this booklet and himself a general surgeon, passionately advocates conservative treatment of cervical vertebral syndromes. In rejecting mechanical compression as the decisive factor in the aetiology of the cervical irritative syndromes, he considers a "neural hyperergic" reaction of the spinal roots as the essential factor, and he emphasizes that this reaction can be abolished pharmacologically without the anatomical situation being changed. His favourite method of treatment, apart from the psychological approach, is procaine block of the stellate ganglion. Reischauer claims that he was the first to make the German doctor aware of the existence, clinical picture, and special entity of the cervical root irritation syndrome, and—as he expresses it—in accordance with the tradition of true German medical teaching, he has dissociated himself from the purely mechanical conception of the mechanism of the syndrome held in foreign countries which has led to a surgical-orthopaedic line of treatment. He deplores that foreign influence, alien to German nature, has been accepted so widely amongst his German colleagues!


It is the author's aim to give, in this monograph, a brief but comprehensive survey of the advances made during World War II in the surgical treatment of peripheral nerve lesions. The survey is based mainly on the experience of workers in this field in the English-speaking countries, and, as the author studied after the war under Mr. Seddon, it is natural that the observations of the team of the Oxford Peripheral Nerve Centre have a prominent place in this survey.

In the general part of the book, following an historical introduction, a brief analysis is given of the functional changes resulting from peripheral nerve lesions and of their diagnosis by various clinical methods, amongst which the author emphasizes the value of sweat tests for the clarification of peripheral nerve lesions. In describing various dye tests, the author makes incorrect reference to the colour indicators used for the sweat tests: the colour indicator of the starch iodine method is not black but dark blue, and the colour of the quinizarin powder is not crimson ("purpurrot") but purple—obviously the author confused these words when translating from the English into German.

In a special chapter, the author discusses in detail the pathological changes underlying the degeneration and regeneration of peripheral nerves in correlation to the indications for surgical treatment. This is followed by a description of the general surgical techniques, including after-care following nerve suture. After discussing the special features of peripheral nerve lesions, combined with fractures and vascular lesions, and the problem of pain following peripheral nerve injuries, technical details of the surgical treatment of lesions of individual nerves are described and illustrated by instructive drawings and photographs.

Continental surgeons unfamiliar with the advances made in recent years in the English-speaking countries in the treatment of peripheral nerve lesions will find this monograph a useful guide.


This is the initial endeavour to present some record of the Congress of Neurological Surgeons. It is proposed that at each annual meeting, in addition to reporting the discussions, one or more neurological scientists will be honoured. In this instance, Sir Geoffrey Jefferson was the person chosen, and the first half of this book contains three noteworthy papers which he gave in the U.S.A., the subjects being "Integration of the Brain", "Trigeminal Neurinomas", and "Compression of the Optic Pathways by Aneurysms". There follows a report of three panel discussions on "the Frontal Lobes", "Psychosurgery", and the "Use of Fluids and Electrolytes in the Management of the Neurosurgical Patient".


This book is primarily intended for neurosurgeons. The sections on the mechanism of pain are concerned much more with anatomy than physiology, and thus lack something which is nowadays expected from research workers in this field, but the surgical sections contain a great wealth of clinical material of great value to the surgeon. Indeed, there are 420 case histories reported in which the patient has been treated surgically for intractable pain, and a great variety of operations are described. One is somewhat overwhelmed by the surgical view that pain should be treated by cutting something: either the peripheral nerve, the posterior nerve roots, the sympathetic supply, spinothalamic tract, or frontal lobe connections.

Thus, the cautious doctor will be disturbed to read on page 420 of several patients between 20 and 35 years of age who have had major operations of spinal tractotomy.
or rhizotomy for relief of the discomfort of a painful operation scar. Many of the surgical methods described are reported to have failed completely in a high proportion of the cases, so much so that one can hardly be impressed by the clinical approach described. However, the dangers and complications are fully documented with complete frankness, so the reader can calculate for himself the chances of benefit from the various operations considered.


This is a book of importance in which radiology, clinical signs, and pathological anatomy are considered together. It is welcome among the reference works in all departments where neuroradiology is practised, and the issue of a second edition provides a fresh opportunity to obtain it for those purposes. It is, however, unlikely to obtain a wider public or to be put to very active use, for more than half the book is devoted to illustrating the ventriculographic appearance of space-occupying lesions which, in many clinics, would today be investigated by angiography.

To those radiologists who have been influenced by modern Swedish teaching, some of the methods here described will appear to be old-fashioned.

One of the features which most clearly "dates" this book is the failure to utilize or to discuss "fractional" lumbar encephalography. On page 29 the authors mention, in passing, that the scout films taken after 20 ml. of helium have been injected are often extremely helpful, but it is clear that they rely upon more extensive gas injections. The loss is theirs, for failure to examine the basal cisterns after the controlled injection of air deprives them of the opportunity to illustrate the usefulness of this technique in studying small lesions of the suprasellar region, or of the cerebellopontine angle, and in demonstrating the site of obstruction in some cases of external hydrocephalus.


The author has conducted an extensive review of skull radiographs and presents much data on the measurements of normal and abnormal skulls. The book, however, is primarily concerned with the syndrome associated with the names of Morgagni, Morel, Stewart, and Moore. The author is an ardent believer in this syndrome, but among the many who are sceptical of the syndrome's existence this book will make few converts.


In 344 pages, Professor Morin has produced an account of the physiology of the central nervous system for medical students. He presents without irrelevant detail an historical sequence of important discoveries, ideas, clinical observations, and laboratory experiments leading to modern knowledge. The subject matter is comprehensive—from spinal roots to cerebral cortex—but the division of chapters is unbalanced and their order original, if irrational.

In parts, the book is out of date. Lloyd's important work on the spinal cord and reflexes receives but scant mention and Eccles' none at all. Though the subject of "muscle tone" has a whole chapter devoted to it, the vastly important muscle spindle is dismissed in a few lines.

In general, however, this book provides a clear and concise account of the physiology of the central nervous system from the experimental and clinical angle.


In the general chapters of this monograph the author describes the anatomical and embryological, as well as the mechanical, peculiarities of the occipito-cervical region and also gives details of the technique of radiological examination of this area.

In the following chapters, the pathology is discussed, with special reference to congenital anomalies of both the occipital bone and the atlas-epistropheus complex.

The monograph is well illustrated.


This atlas is undoubtedly useful, for relatively little has been published describing the human brain in sagittal section. While for many purposes coronal sections through the cerebral hemispheres and horizontal sections through the brain-stem are the most convenient material to work on, there are occasions when the sagittal plane is of especial value, and some help in understanding such preparations will be found in these illustrations.

The sections are taken from a whole brain embedded in celloidin and the 45 plates shown are stains by a method for myelin. Most sections are magnified 1·5 times, whilst 16 plates showing the brain-stem are enlarged 2·5 times to give greater detail.

Although this work can in no way be compared with the monumental and indispensable atlas of Riley, it can be recommended as a very useful addition to the library of the anatomist, neurologist, and neuropathologist.


This introductory textbook can be confidently recommended to the student of neurology. The author has a special talent for clarity of arrangement and expression,
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and leads the reader by well chosen stages all the way from the neurophysiology of the amoebo to the study of what is known of the human nervous system. He succeeds to an unusual extent in presenting the romance of what is known and the challenge of what is still obscure. However, this second edition is not so up to date as was the first, and there is much recent work, for example, on the olfactory connexions, the higher visual cortex, and the hippocampus, which is not referred to here. Perhaps the author considers these matters too technical for the junior student who must pass an examination in anatomy. If so, many would wish that he would use his talent for description and comment to write a book for the clinical neurologist and psychiatrist, who has no further examinations to worry about!


This book presents the papers read at the thirty-third Annual Meeting of the Association for Research in Nervous and Mental Disease, together with a synopsis of the discussion which followed each paper. The field covered is very large and rather heterogeneous, so that there is very little in the way of a thread of continuity to bind the whole together. The papers themselves vary equally widely in their nature and significance. A large part of them are either essays of a rather general kind, or critical reviews of the literature on the subject chosen; but there are also contributions of original data.

It is these latter which will have the most permanent value. They include accounts of chemical experiments with strains of mice susceptible to sound-induced seizures (Ginsburg), genetical studies on resistance to viruses (Sabin), reflex activity in the human embryo (Hooker), behavioural growth patterns in foetus and infant (Gesell), studies of the trigeminal nerve and its central connexions in the foetus (Humphrey), the phylogeny of the sensory trigeminal complex (Crosby and Ross), new data on inheritance in phenyl-pyruvic olibophrenia (Jervis), in neuromuscular disease (Tyler), in epilepsy (Lennox and Jolly), and in migraine (Goodell, Lewontin, and Wolff). Apart from the geneticist therefore, there is matter to interest the human and the comparative anatomist, embryologist, physiologist, bacteriologist, biochemist, psychologist, paediatrician, neurologist, and psychiatrist. Of all these, it is the neurologist who draws the biggest dividend.


This book is primarily a review of the mental changes after leucotomy in 36 patients personally studied by the author. They were carefully selected from a much larger group, as being substantially "normal" for the psychological tests which were to be applied. The attributes tested were intelligence, vocabulary, tempo (rate of performance), persistence, speed-accuracy preference, perseveration, fluency, use of abstract words, object-sorting, foresight and planning (as shown by Porteus' maze tests), work and pleasure attitudes, and imaginative response (as shown by the ink-blot test). The author found significant reductions in abstract thought, in planning, foresight, and appreciation of one's own mistakes. Relations and differences were also less easily appreciated. Surprisingly, however, persistence, speed-accuracy, and perseveration did not show much change, although the author gained the impression that sustained attention is impaired. The changes mentioned are in cognitive functions, but the author is quite aware that underlying motivational changes (which are themselves not easily assessed quantitatively but which general observations suggest certainly occur) may in fact be causing apparent intellectual changes. The value of this book lies particularly in its attempt at personal assessment of all cases by quantitative methods where possible. For the clinician its usefulness is increased by the follow-up of cases for several years after operation. In addition, the first nine chapters contain a brief but critical assessment of earlier work on frontal lobe function in both its clinical and experimental aspects.


The subjects of this study were 77 patients who had had a cerebral lobotomy, and 17 patients who had recovered from a mental illness without any such operation. The inquiry was designed to test the hypothesis that the operation "alters the structure of the self through reducing capacity for the feeling of self-continuity." Three controlled interview techniques were used, which were intended to measure self-regarding span, self-concern, and sensibility. Patients who had had a standard prefrontal lobotomy differed from the control subjects in their performance on these tests, and when very small groups of patients who had had transorbital or other variants of the operation were compared with one another and with the standard group it appeared that the test scores varied with the degree of brain damage sustained. The findings are suggestive rather than conclusive. The weakness of the inquiry lies in the technical handling of the tests, which have not been standardized on a normal population, or validated, and are scored in an unsatisfactory way. The control group used in the study was dangerously small.


Twenty years ago the publication of a little green book on Hallucinations et Délire indicated to the discriminating reader that a well-informed and penetrating mind had come into French psychiatry. Dr. Ey, the
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author of the book, had already published a thesis on the chemical concomitants of morbid emotional states and several papers on hallucinations and kindred topics, but these were hardly attended to outside France. Clarity and precision, the qualities which M. Séglas praised in his foreword to the book on hallucinations and delusions, have continued to characterize M. Ey's writings, and are prominent in the magnum opus which has been appearing volume by volume since 1950. The present book, the third in the series, is written on the same plan as its predecessors and displays M. Ey's extraordinarily wide acquaintance with psychiatric writings in many languages—a rare feature nowadays—and his catholic yet critical interest in diverse expositions and theories.

The acute psychoses, with which this volume is concerned, raise problems of classification. The first chapter in the book elucidates the history of this complicated question and explains the author's principles of classification. In succeeding chapters mania, melancholia, atypical acute hallucinoses and delusional attacks, confusion and onioid states, cyclical affective disorders, and epilepsy are examined. The philosophical and psychological problems inherent in the author's theory of consciousness and its hierarchical breakdown are lucidly stated in the final chapter, which is crucial for the author's purpose. It is not easy reading, nor does it accord with the current English view of consciousness, but it contains material for a basic approach to the psychopathology of mental disorder. The author has been much influenced by Hughlings Jackson.

This is a learned and thoughtful work, which demonstrates that French psychiatry, with its great tradition, still offers an original viewpoint and a vigorous contribution of its own, deserving of our close attention.


The author's experience in the use and interpretation of the Rorschach test ensures that this part of the joint enquiry reported here was very competently performed. The Rorschach studies, however, were not the most important and difficult part of the research. This lay in finding a point de repère. Since schizophrenia was the subject of investigation, some consistency of definition and uniformity in its application were obviously essential, yet were lacking. The investigators held strongly to the dynamic conception of mental illness and depre- cated the use of the Kraepelinian concepts. In an illuminating discussion reported verbatim in the book, Dr. Grinker (who directed the psychiatric procedures) said that the investigators must forget all the statements about schizophrenia "in Bleuler and any of the other textbooks" and must begin afresh. The method employed consisted in taking series of persons diagnosed as schizophrenic, assessing them in respect of a large number of psychiatric and Rorschach items believed to be appropriate to schizophrenia, and then, for each person, carrying out a factorial analysis of these items with a view to establishing clinical and psychological patterns. Six such patterns or reaction types were arrived at and are here described. They are of interest because of the route by which they were reached rather than for any intrinsic novelty or promise they contain of a more objective and communicable set of criteria for diagnosing schizophrenia in children or adults.


Apart from the writings of Jung himself, little medical literature has been published on the psychopathology of mental illness interpreted according to the Jungian method and theory. The present book contains observations made by the author during nine weeks' treatment of a woman who previously and subsequently received electro-convulsive therapy for her schizophrenic attack, from which she recovered after about nine months' illness.

Twelve coloured drawings which the patient produced at Dr. Perry's request are the main material; they are related to her delusions and total mental state, and their symbolism is closely scrutinized. The quadrated circle, familiar as a symbol in many religions, was very prominent in the drawings, and the patient showed much concern about her position at the centre of the circle of her family and her friends. Dr. Perry examines the relation of this to the archetypal images which Jung considered so important, and expounds the theoretical matrix, paying particular attention to the symbolism of opposites and of rebirth. The book is well written and impressively erudite; it offers a faithful presentation of the standpoint of analytical psychology; and it will be attractive to readers in direct ratio to their enjoyment of studies in abstruse symbolism, whether mystical, psychological, or alchemical.


Although Dr. Angel is a psychiatrist, his account of continuous sleep therapy shows much misconception of the history of this method of psychiatric treatment. Possibly this is because he took up the method at the instance of a surgeon, Professor Wertheimer of Lyons, who had heard of its use in Russia and wished it to be applied in his wards. French psychiatrists mostly disregarded the method at the time (in the 1920s and 30s) when it was being extensively employed in Switzerland and Great Britain. Dr. Angel believes that it was first used in Russia after the second world war; this is incorrect, as the writings of Serejski, Ivanov-Smolenski, Richter and Stefanov, Shevelev and others from 1935 onwards attest. Dr. Angel gives a lucid account of the Russian views about the rationale of the method, which of course relies exclusively on Pavlov's theories of
inhibition; and he outlines the technique and contra-
indication. He makes unduly light of the dangers,
though in a footnote he says that one of his patients, a
hypertensive, died "au cours d'une cure". The treatment
has been applied in neurotic and psychotic disorders,
artherial hypertension, peptic ulcer, asthma, eczema,
psoriasis, neurodermatitis, post-operative shock, head
injury, and a variety of other conditions. Evidently in
France it is a running mate for artificial "hibernation"
produced by chlorpromazine, which is likewise supposed
by Follin to have an inhibiting eect on the cerebral
cortex: Dr. Angel evidently favours a combination of
the two methods.

The Lowenfeld Mosaic Test. By Margaret Lowenfeld.
(Pp. 300; 144 coloured plates, 15 figures. 50s.)

This book describes the mosaic test of personality
devised and used by the author, and includes a description
of the responses to the material by individuals of
different age, culture-pattern, and mental stability.
To a certain group of psychologists its chief interest
will probably lie in the possibility it offers of distinguishing
between normal and abnormal mental states; to
anthropologists it may prove a useful tool for comparing
the art-forms of different cultures; to artists the 144
coloured plates may have a certain fascination.
The author herself is at pains to point out the value
of this test compared with others of personality and
intellect, and in so doing unconsciously draws attention
to a defect in most mental tests, her own included—they
are not really tests at all. This one, like others in the
repertoire of the clinical psychologist, aims to test no
particular hypothesis, and although each mosaic designed
by an individual obviously reflects his attitudes and
abilities, its interpretations, as the author points out,
depend on a wide of human behaviour.

Induced Abortion on Psychiatric Grounds. By Martin

This well-written monograph is specially relevant to
social psychiatry. It is primarily an account of psychiatric
follow-up studies of 479 women, upon whom legally
authorized abortions were carried out in Stockholm.
It includes a concise account of the medico-legal history
of this procedure in Sweden, and statistics about it from
1939 to 1952.

BOOKS RECEIVED

(Review in a later issue is not precluded by notice here of books
recently received.)

Histopathologie und Klinische Symptomatologie der
Anoxisch-Vasalen Hirnschädigungen. By S. Körnay.
(Pp. 239; 89 figures. Price not given.) Budapest:
Akadémiai Kiadó. 1955.

Alcohol and Alcoholism. Report of an Expert
Committee: W.H.O. Technical Report Series No. 94.

Die Zerebralen Herdstörungen bei Hinterhaupts-
verletzungen und ihre Beurteilung. By Clemens Faust.
(Pp. viii + 111; 41 figures. DM. 14.70.) Stuttgart:
Georg Thieme Verlag. 1955.

The Psychology of Abnormal People. By John J. B.
Morgan and George D. Lovell. Revised edition. (Pp. xi
+688 ; illustrated. 35s.) London : Longmans, Green.

Psychiatry for the Family Physician. By C. Knight
1955.

(Pp. 324. 30s.) Christchurch, N.Z.: N. M. Peryer.
1955.

Legislation Affecting Psychiatric Treatment. Fourth
Report of the Expert Committee on Mental Health:
1s. 9d.) Geneva: World Health Organization; London:

The Postural Complex: Observations as to Cause,
Diagnosis and Treatment. By Laurence Jones. (Pp. xvii
+ 156; 79 figures. 70s.) Oxford: Blackwell Scientific
Publications. 1955.

Atlas of Roentgen Anatomy of the Skull. By Lewis E.
Etter. (Pp. xv + 215; 237 plates. £5 6s.) Oxford:

J.A.M.A. Clinical Abstracts of Diagnosis and Treatment.
Edited by Noah D. Fabricant. (Pp. vi + 627.
$5.50.) London and New York: Grune & Stratton.
1955.

Lerbruch der Allgemeinen Psychopathologie. By K. W.
Bash. (Pp. vii + 288; 10 figures. DM 29.50.)

Psychological Medicine. By Desmond Curran and
Maurice Partridge. (Pp. viii + 407; 20 figures. 21s.)

Electrochemistry in Biology and Medicine. Edited by
Theodore Shedlovsky. (Pp. xii + 369; illustrated. 84s.)
1955.

Studies on the Cerebral Cortex. By S. Ramón y Cajal.
(Pp. xi + 179; 108 figures. 27s. 6d.) London: Lloyd-

Thallium Poisoning. By J. J. G. Prick, M. G. Sillevis
Smitt, and L. Muller. (Pp. vii + 155; 21 figures. 19s.)

The Postnatal Development of the Human Cerebral
Cortex. Volume V: The Cortex of the Fifteen-Month
Infant. By J. LeRoy Conel. (Pp. 220 + 235 figures on
109 plates. 100s.) Cambridge, Mass.: Harvard Uni-
versity Press; London: Oxford University Press
(Geoffrey Cumberlege). 1955.

Biochemistry and the Central Nervous System. By
Henry McIlwain. (Pp. viii + 272; 43 figures. 40s.)

We welcome the appearance of Neuro-Chirurgie, a new
journal designed to report the transactions of the French-
speaking Neurosurgical Society. The first issue appeared
in February, 1955.