

## THE PSYCHONEUROSES.

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To discuss progress in the psychoneuroses without encroaching on the subjects of psychopathology and psychotherapy may appear like an attempt to play Hamlet without the Prince of Denmark. However, there remain certain aspects of aetiology, nosology, differential diagnosis and treatment which are not included in those subjects. It must clearly be understood that the ground covered by the following discussion is strictly limited owing to the above considerations. Thus, psycho-analytic work on the neuroses is to a great extent a matter of psychopathology and psychotherapy, and can therefore find little place in this chapter.

In a period dominated by war, it is natural that attention should be directed mainly to the war neuroses, in the wide sense of the term, and to the modifications in the psychoneuroses brought about by wartime conditions. The role played by physical factors such as blast and concussion thus takes on a new interest. The greater part of this paper will therefore be devoted to such topics.

### I. *Work based on Experience in the Last War.*

During the period immediately preceding this war, and for some time after it began (the period popularly known as the "phony war"), a considerable number of papers and a few books were published on the subject of war neurosis, based on the authors' experience of the last war. Valuable and useful as these were, they hardly come under the heading of "recent progress," with one or two exceptions, notably Kardiner's monograph. In addition, we had the benefit of Mira's more recent experience of modern war in Spain; his contributions will be referred to in a later section.

Outstanding in this field is the book edited by Emanuel Miller, entitled *The Neuroses in War* (1940). This contains a review of the literature, followed by contributions from a number of distinguished psychiatrists and psychotherapists, most of whom had experience of the handling of neurotic cases in the last war. The book covers a wide field, and provides a good picture of what was learned at that time.

Mayer-Gross (1939) states that in Germany during the last war he formed the view that war neurosis is not an illness affecting only unstable or psychopathic personalities. He says: "Constitutional mental equipment as an aetiological factor may become entirely negligible when psychological stress, exhaustion or sleeplessness are undermining the moral resistance of the combatant. . . . These severe anxiety states occurring in the front line are

easy to understand . . . their prognosis is generally good." Experience in the present war of patients who have been subjected to real stress would seem to endorse these statements, though there is a tendency in some quarters to stress constitutional factors; this is probably due to the relative lack of acute stress except at special periods, such as the time of the Dunkirk evacuation. As a result, psychiatrists have had to spend most of their time dealing with patients who have broken down under minimal stress, many of whom should never have been accepted for service. Mayer-Gross goes on to discuss a more chronic type having the symptoms of conversion hysteria, but developing out of an anxiety state or one of severe nervous exhaustion; others, however, with identical symptoms, had had no precedent anxiety state, and many had never even been near the firing-line.

Dillon (1939), discussing "Neuroses among Combatant Troops in the Great War," differentiates five types of acute reaction, as follows:

1. Direct anxiety or fear state characterized by generalized shaking, nervousness, etc.
2. Mental confusion, or stuporous phenomena, generally of short duration, and regarded as more intense and severe instances of Type I.
3. Conversion symptoms.
4. Amnesias and fugues.
5. Combined types.

Type 1 constituted 70 per cent. of the cases seen, type 3, 20 per cent. Comparison with Hubert's (1941) paper shows that the cases seen in France during the period preceding the evacuation of the B.E.F. correspond very closely to Dillon's description.

Kardiner's (1941) monograph, *The Traumatic Neuroses of War*, is based on work done during 1922-1925 in a U.S. Veterans' Hospital. It is partly practical, partly theoretical; only the former part need concern us here. The book does not purport to deal with all psychic disturbances of war, but with "a highly specific syndrome which can be called the *traumatic neurosis*." The importance of this syndrome lies in the severe incapacities to which it gives rise and in the forensic problems of compensation which are involved. Kardiner seeks to establish its symptomatology, the criteria for differential diagnosis, and a rationale for therapy. He distinguishes acute, transitional and stabilized forms; the stabilized forms generally take two to three weeks to appear, but occasionally as much as six months, especially in the case of those forms terminating in epileptiform phenomena. It is the stabilized forms which Kardiner has studied. He describes cases of hypochondriasis, schizophrenia, transference neurosis (phobias, defensive ceremonials and tics), autonomic disturbances (effort syndrome, etc.), sensori-motor disorders (conversion hysteria), and the "epileptic symptom complex." Under this last heading Kardiner groups such conditions as paroxysmal syncopal attacks, corresponding to the hysterical syncope of peacetime; narcoleptic attacks; twilight states, taking the form either of somnambulistic trance or of trance during the waking state, with active hallucinatory experiences and mimicry, usually followed by complete amnesia; also true convulsive states with very deep disturbances of consciousness, or wild gesticulation, stamping of the feet and crying, or partial tetany.

In this connection he fails to deal with the part played by hyperventilation in many such cases.

Kardiner points out that normally the reaction to psychic shock is a temporary one, though rarely death may occur from vagus stimulation. In the pathological cases the results are deeper and more lasting, and they undergo psychological elaboration after the patient is out of danger, often while he is in hospital, though Kardiner thinks the influence of suggestion has been much exaggerated. Most of the acute cases recovered, but a large number persisted in a chronic form as autonomic disturbances. The most severe and difficult group is that designated as the epileptic symptom complex, and eleven such cases are described. These include cases with severe headaches and intense vertigo, sometimes lapsing into unconsciousness; dazed or confused twilight states; various somatic or peripheral paraesthesias; or complete loss of consciousness, with or without convulsions, which may be accompanied by tongue-biting and relaxation of sphincters. In some cases these attacks come on after some specific external provocation, which proves often to be essentially the same situation as that which caused the original loss of consciousness, i.e. a conditioned reflex mechanism; in other cases they are preceded by an aura, which represents a hallucinatory reproduction of some of the circumstances originally associated with the trauma. Some, while unconscious, re-live their traumatic experiences; others have typical tonic and clonic convulsions.

The amount of anxiety perceived as such is variable, and the more readily the anxiety is utilized in the form of displacement or incorporated into the attack in some way, the less does the disease take on the characteristics of essential epilepsy. Very few cases complain of phobias, and these are never so organized or elaborate as in the transference neuroses; not infrequently it is the unconscious spell itself of which they are afraid. Except those cases which are indistinguishable from epilepsy, all have the typical dreams of the traumatic neurotic. When such dreams have completely ceased, the patient shows an apathy to his spells and lack of interest in his rehabilitation which are equalled only by the true epileptic.

It is clear that Kardiner uses the word "trauma" in the sense of psychic, not somatic trauma, and this is liable to create some confusion, as the term "traumatic neurosis" is so often taken to imply a neurosis consequent upon bodily injury. It is therefore necessary to examine what Kardiner understands by "trauma," though this soon takes us into the realm of psychopathology. After discussing the conditions of modern warfare which predispose to such reactions, e.g. by precipitating an egoistic conflict of great violence and creating an ambivalence towards the group, at once the persecutor and the protector, and so giving rise to disorganized adaptation types, he remarks that none of these changes would be effectual without the actual traumatic situation in the form of exposure to severe shocks and injury. A trauma must be defined as a relationship between an external stimulus and the resources available immediately to adjust to, sidestep, or otherwise master the stimulus. The sudden time factor is important. The result of the trauma is an inhibition of function of the ego in its executive task of adaptation to the external world. A traumatic

neurosis is a type of adaptation in which no complete restitution takes place, but in which the individual continues with a reduction of resources or a contraction of the ego.

The various forms of the traumatic neurosis show certain constant features besides this contraction of functioning. First, there is fixation on the trauma, for which there is complete amnesia, or else many details of the traumatic experience are missing, and the appropriate affect is either absent, as in some epileptiform cases, or not associated with the trauma. There is reluctance to think of the trauma or anything resembling it, but its effects are constantly active in the patient's dream life. The second feature is the typical dream life, which is strangely stereotyped, with redundant and perseverative images instead of the condensation and compactness found in the dreams of the psychoneurotic. The dream as a rule only begins to say something, but never completes it, and the attempt to get associations is usually futile. The most common content is the threat of annihilation, but there are also frequent dreams in which the patient is the aggressor, though usually defeated. Variants are dreams of frustration, every activity being futile; occupational dreams with obstacles and threatened disaster; guilt dreams of engaging in some hostile pursuit against a loved object, awaking with a profound feeling of guilt. The annihilation dreams are largely responsible for the insomnia; the patient awakens from such a dream with a feeling of relief and goes back to sleep again, often repeating this performance several times in one night. "These three types of dreams say essentially the same thing in different ways; they all reproduce a helpless situation with its tremendous release of disorganized aggression. They all say, 'I am as at birth; I perceive the world, but can do nothing with it, hence it threatens me'."

The third characteristic feature is irritability, which is absent in no case. It concerns chiefly auditory stimuli, but sometimes temperature, pain and tactile stimuli. Physiologically there is lowering of the threshold of stimulation, psychologically there is a state of readiness for fright reactions. These are paroxysmal, lacking organization, and after they are over there remains no residue of anxiety, but only a heightened sensitivity to the stimulus. Thus they differ from a displacement phobia and are more closely related to the syncopal reaction; a loud noise is often the signal for explosive violence or lapse of consciousness, or in milder cases for generalized tremor and fright. Their increased susceptibility to stimuli prevents these patients from falling asleep.

The fourth characteristic is the tendency to aggression and violence, which is always present. These outbursts, which are intimately related to the irritability, are not deliberate but always impulsive and episodic, and they are never found without reactions of tenderness. Inhibitions of aggression take the form of inaptitude and lack of interest in work, fatigability, etc. The intellectual field is contracted, they have great reluctance to think directly and consistently about anything and are distractible and apathetic, though the interest in compensation is vividly maintained.

The course of these conditions is likely to be chronic if they serve some secondary gain, conscious or unconscious; the most important external

factor is that of compensation. Apart from these factors, the spontaneous course is in the direction of *slow* improvement. They do not get worse with time. Acute stuporous or delirious forms as a rule improve from the acute stage, but remain fixed in some form of epileptoid repetition. Tics and defensive ceremonials are very chronic, but the latter are extremely favourable for treatment. Paralytic cases, once permitted to become chronic, continue unaltered and develop contractures. The epileptiform cases likewise are mainly long, chronic and unaltering.

The prognosis is stated by Kardiner to be good in the acute stages if they are adequately treated and not complicated organically or by compensation factors; but he does not give his grounds for this belief, and it clearly cannot be based on his experience with chronic cases. The sensori-motor types are as a rule hopeless if not recovered within six months—but one's experience suggests that there are many exceptions to this rule. Autonomic disturbances are mostly inaccessible to therapy. Their efficiency is inordinately impaired and their discomfort constant. The prognosis in the epileptiform types is good if there is no injury to the brain, if they are treated immediately and not permitted to leave medical care before complete recovery. If they are compensated on an income basis, the outlook is almost hopeless. The prognosis is also less good if the trauma was inadequate.

In differential diagnosis it is to be noted that in the sensori-motor and epileptiform reactions the typical dream-life may be absent, especially in the more chronic cases. The following points are suggested for differentiating the latter from essential epilepsy: (1) In traumatic neurosis the phenomena begin within a few weeks of the trauma; (2) the attacks are initiated by external stimuli resembling the situation in the original trauma; (3) the aura is usually distinctive, being a reproduction of the last sensation before the loss of consciousness; (4) the dream life during the first year; (5) the character of the seizure; (6) the EEG will help with regard to presence or absence of injury to the brain; (7) the startle reflex may help.

Finally Kardiner discusses the very important social and forensic issues involved. These are due largely to the persistent diminution in the capacity for work shown by these patients, and to the aggravating factor of compensation. Much of the social problem could be prevented by good medical practice. Adequate care immediately after the trauma could substantially reduce the number of chronic cases after the war, as the prognosis is excellent before they become stabilized. This would require proper organization, and treatment by doctors skilled in psychopathology. As to the chronic forms, their treatment would require a large organization of trained psychiatrists, and even then the prognosis would often be extremely dubious. Kardiner would therefore use measures of rehabilitation for them, though the most severe epileptiform cases probably cannot be rehabilitated for any occupation. Some will have to be compensated, but this might be reserved for those who have proved incurable after two or three years in a convalescent camp, running half self-sufficient enterprises with limited responsibility and constant medical care. It seems clear that it is cases of this type which are likely to constitute our main problem after the war, unless they are adequately dealt with now, and it is for this



reason that it has been felt justifiable to devote so much space to Kardiner's work, which deals with the problem in so thorough a manner. A recent paper by Rado (1942) approaches the question from much the same angle, but is concerned with psychopathology rather than clinical features.

It should be noted that Kardiner holds that the "traumatic neurosis" has a different structure from ordinary transference neuroses. This is a point of some importance in view of the statement frequently made that there is nothing to distinguish war neuroses from those of peace time. This is, of course, true to this extent, that ordinary transference neuroses occur also in war time and in Service patients, and that traumatic neuroses occur also in peace time; but this does not affect the status of the traumatic neurosis.

## II. *Neurosis following Head Injury.*

It is a noteworthy omission in Kardiner's work that he fails to discuss seriously the possible role played by head injury in his traumatic neuroses, an omission the more remarkable in that this term is often used to indicate cases following bodily injury. Moreover, there is a striking resemblance between many of the symptoms of "traumatic neurosis" and some which are generally regarded as the organically determined consequence of head injury. Let us therefore examine some of the recent work in this field.

R. Brun (1938) discusses very fully the differential diagnosis between organic and psychoneurotic states after head injuries. He points out that even irreversible late results of cerebral contusion are not always easy to distinguish from reactive psychoneurotic disturbances by the psychic picture alone, especially in those cases where the organic disorder lies more in the region of character and affect. The customary clinical tests of intellectual function can give deceptive results. He prefers to rely on neurological signs. Apart from these cases, he recognizes "functional-organic" pictures due to a cerebral shock acting directly on the vegetative brain centres. This can come about in two different ways; first, as a part-manifestation of a general or circumscribed commotio cerebri, characterized by a vegetative and especially vasomotor symptom-complex, but also by general cerebro-spinal irritability, just as in a classical neurasthenia. This evidently corresponds closely to Symonds' "minor contusion syndrome." The second way in which shock can come about is quite different; it takes place not in a gross mechanical way, but through the cortex, i.e. the action on the vegetative nerve centres is carried out through the mediation of the psyche, yet Brun holds that the symptoms are produced in principle organically, because there is no conscious consideration or reflection. The distinction from psychoneurosis is likened to that between an unconditioned and a conditioned reflex. This savours strongly of casuistry, and shows the dangers of pushing too far the artificial division of body and mind. These latter cases are what Brun calls "Shreckneurosen" (fright neuroses), and his clinical description of them resembles that of Kardiner's traumatic neuroses. However, Brun states that the symptoms are as a rule transient, lasting from a few days to several months at the most; but in a considerable proportion there is an overlay of psychoneurosis, usually hysteria or anxiety hysteria. If there is no predisposition to hysterical symptoms they,

like the vegetative ones, rapidly disappear. Disposition is not absolutely essential for a fright neurosis, and the experience of war showed that healthy strong peasant youths may fall victim to the overwhelming impression of catastrophic happenings.

The above-mentioned conditions are all regarded by Brun as standing outside the concept of post-traumatic neurosis in the narrower sense, for even the fright neurosis can be described without constraint (*zwanglos*) as direct brain injury. The two functional-organic syndromes are analogous to Freud's "actual neuroses," neurasthenia and anxiety neurosis respectively. In the true psychoneurosis the trauma is not the only, nor usually the essential factor, which is to be found in the mental experience of the accident and its secondary elaboration, together with its anticipated social and economic consequences. Brun found that 50.5 per cent. of 400 cases of head injury showed neurotic features in this narrower sense; and 26.5 per cent. were purely neurotic. The slighter the brain injury, the greater the tendency to neurosis.

Brend (1941) points out the importance of the differential diagnosis between contusion of the brain following concussion and psychoneurosis, owing to the fact that the Personal Injuries (Emergency Provisions) Act provides that compensation to civilians injured by enemy action shall be payable only for disablement caused by physical injuries. Among 300 persons injured in air raids and diagnosed as shock, concussion, anxiety neurosis, etc., he found 30 per cent. with a typical post-concussion syndrome, 50 per cent. of anxiety states, the remainder showing a combination. He regards the differential diagnosis as a simpler matter than do many other authors. Not less than two-thirds of the "neuroses" consist of a condition for which Brend suggests a new term—"hyperphobosis"—i.e. a condition characterized by terror on hearing air-raid warnings or gunfire and sleeplessness through listening for warnings, often with no evidence of previous neurotic tendencies. Brend does not think this condition should be regarded as a neurosis at all. Although the suggested new term has not come into general use, a number of authors have expressed similar opinions about this condition, which are not inconsistent with Kardiner's views.

Other authors find it much more difficult to draw hard and fast lines between the various syndromes following head injury. Symonds (1942) says, for instance: "As to the distinction between the physiogenic and psychogenic factors in a given case, they appear in most cases so closely intertwined that to separate them is unnatural. . . . It will be understood from what I have said that I regard the practice of dividing the post-contusional states into two groups, labelling the one organic and the other functional, or neurotic, as unprofitable and misleading." Lewis (1942*a*) concurs with this, and says that insistence upon the question, "Is it due to structural damage or is it psychogenic?" is understandable but fallacious; physical damage to the neuraxis can produce neuroses and personality disorders, and yet the ordinary features of the exogenous mental syndrome may be totally lacking. Nor can we conclude that a condition is physiogenic whenever we can prove existent cerebral damage. The criteria of psychogenesis are equally dubious, owing to

the ease with which one can find psychological "causes" when one sets out to look for them. "I believe that we have no unequivocal criteria, no final distinction, between physiogenic and psychogenic because the search implies a dualism which is not there." Lewis reports a comparison between 64 post-contusional states admitted to a neurosis centre and 64 other neurotic patients, so chosen that in each group there were the same number of conversion hysterias, acute anxiety states, etc. The two groups differed significantly at remarkably few points, and these differences were only on the margin of statistical significance. "The striking thing is that the long-standing, relatively intractable post-contusional syndrome is apt to occur in much the same person as develops a psychiatric syndrome in other circumstances without any brain injury at all." This seems to me to suggest strongly that psychological factors are very important in determining *chronicity*.

Neustatter's (1942) contribution to this problem points in the same direction. He compared the symptoms in three groups, each of 30 patients: (1) soldiers developing psychological disorders who had not been in action; (2) cases subjected to enemy action but not to blast; (3) cases subjected to blast, without gross head injury. In each group, approximately equal numbers showed depression, anxiety, hysterical and obsessional symptoms. The various symptoms of the minor contusion syndrome occurred in practically equal numbers in the three groups. In each group about a third of the cases improved. Seven of group (2) and nine of group (3) showed no signs of unstable past personality, this difference being obviously not significant. Although these results would indicate that it cannot be argued that anxiety symptoms are caused by contusion, Neustatter suggests that it may interfere with their subsidence. This is contrary to the conclusion indicated by Lewis's work. Neustatter's point of view would lessen the harshness in the working of a strict interpretation of the Personal Injuries Act; and in passing it may be remarked that this would apply even more strongly if one were to adopt Brun's theory of the fright neurosis. It would be disastrous, however, if we allowed our scientific judgment to be influenced by administrative considerations.

Similar conclusions emerge from Guttman's (1943*a* and *b*) recent work based on 255 consecutive cases of civilian head injury, all treated by early rehabilitation. Only half had headache at any time, and in most of those who complained of headache six months after the injury the symptom was precipitated by psychological causes, or else the patient's attitude towards it was determined by such factors. Only eight did not return to work within six months, and of these only two were incapacitated by cerebral damage. Four were definitely neurotic, a fifth very likely so; the compensation problem played a part in three of these cases. "In all those with mild concussion who stayed off work for seven weeks or more, psychological factors could be found to account for the fact." This does not mean that the others were symptom-free, but that they were able to adjust themselves to their symptoms. Jefferson (1942), Cairns (1942) and Brain (1942) all express corroboratory views.

Schilder (1940) discusses at some length the problem of neuroses following head and brain injuries. After defining a neurosis with some precision, he states that a traumatic neurosis is one which follows an injury to the body,



the trauma bringing about psychological changes. The physiological consequences, especially as they affect the structure and function of the brain, do not constitute the neurosis, but offer material for the neurosis, as far as the individual is aware of them. The post-concussion (minor contusion) syndrome is an organic syndrome even in its psychological manifestations and cannot be classified as a neurosis ; but the objective impairment and subjective experiences originating in organic cerebral changes may become the nucleus for neurotic attitudes. The traumatic neurosis following head injury may, however, be related merely to the psychic experience of the trauma. In particular, feelings of insecurity and changes in consciousness connected with dizziness of central or peripheral origin facilitate neurotic attitudes. Traumas in other parts do not have this effect, so one is justified in differentiating neuroses following head injury from other traumatic neuroses ; this is true also on account of the particular psychological value which an individual places on his head. These points seem to have been overlooked by most other authors. Schilder divides these neuroses into four groups, as follows : (1) anxiety and terror reactions, (2) neurasthenia and hypochondria, (3) hysteria, (4) social reactions, connected with compensation, etc.

Crichton-Miller (1941) maintains that though the name "shell-shock" has been officially banned, cases do occur of blast-concussion, and he puts forward an interesting, if speculative suggestion as to how they may come about ; he supposes that damage may be caused to the brain cells by displacement of fluid owing to compression and suction acting on the elastic abdominal wall. Such a condition would have no psychogenesis, but the effects would depend on the emotional state at the time of the trauma. The worst effects, he says, are seen in the unwounded, because the wounded are able to get the rest they need without loss of prestige. Recovery is influenced by fatigue, age, and other factors. Fatigue is associated with a fall in blood sugar, and indiscriminate administration of sugar may convert a fatigue apathy into an anxiety.

Discussing the same subject, Anderson (1942) describes eight cases, but in most of them it was impossible to exclude an ordinary head injury. He regards them all as showing evidence of an organic reaction, with intellectual impairment in six, memory changes in all cases (though retrograde amnesia was absent in all cases), changes (but not loss) of consciousness, affective lability and apathy, general psychomotor slowing, etc. The EEG was negative in all cases where it was done. Anderson urges that every case exposed to blast should be referred to hospital with a view to immediate psychiatric examination, including a searching organic and neurological examination, examination of the C.S.F., an EEG, and autopsy in fatal cases. But the trouble is that even if one had all these data at one's disposal, even including the autopsy, an unbiased observer might still be in some doubt as to which of the symptoms could be explained on purely organic grounds.

Before leaving this subject mention may be made of one of the extreme exponents of the organic theory of the psychoneuroses. Wigert (1938) approached the problem by the method of encephalography, in which he had the collaboration of a first-rate radiologist (Lysholm). Starting out from the fact that psychopathic pictures may be produced by brain damage, he examined

50 constitutional psychopaths ; in 17 of these he found demonstrable cerebral changes. The 50 were not, however, unselected. Wigert believes that a "psychoneurosis" is the psychic reaction or adaptation in a characterologically peculiar individual, and that this peculiarity differs only in degree, if at all, from that of the psychopaths. He therefore examined a number of psychoneurotics. He reports that the results were "not negative," but gives no figures. He quotes four cases, but does not describe them sufficiently fully to enable one to come to an independent diagnosis. Now the X-rays show only the grossest type of damage ; if we make the assumption that it shows only one case in ten of organic damage, we can say that cerebral changes occur frequently in the psychoneuroses. Radical as this may sound, it is not in fact far removed from the point of view put forward by Henderson in his "Psychopathic States," with the exception that Wigert postulates an organic basis for the psychopathy. The obvious continuation of this research would be by the autopsy method, and it is amazing how this has been neglected in the study of the psychoneuroses. Grünthal (quoted by Mayer-Gross 1939), demonstrated gross cortical damage post-mortem in 17 cases diagnosed as pure "compensation neurosis."

### III. *Psychoneuroses in the Services.*

Rees (1943) gives a general survey of military psychiatry in the United Kingdom, only a small part of which is relevant to the psychoneuroses. Psychiatrists have found that prophylaxis is the most important part of their work ; acute war neurosis has been one of the minor problems. Rees gives reasons why the "psychopathic tenth" tends to find its way into the Army, thus providing a large number who are constitutionally predisposed to neurosis, of whom only a small proportion are likely to benefit sufficiently from treatment to warrant their retention in the Army. An extremely useful experiment, undertaken in the last 18 months consists of the placing of men occupationally (the so-called "Annexure" scheme). Only 9 per cent. of the men so dealt with have turned out failures, and over 70 per cent. have been very successful. Given early treatment, the results in acute war neurosis have also been very successful, and especially so in the Middle East forces.

Hadfield (1942) finds that the most striking change compared with the last war is the far greater proportion of anxiety states as against conversion hysteria—64 per cent. against 29 per cent. out of 577 cases of psychoneurosis seen in hospital. He attributes this to the relative lack of traumatic cases and the greater number of chronic neurotics recruited in this war, and the fact that air raids have brought the front line nearer. Thus Dillon found 70 per cent. anxieties and 20 per cent. hysterias in casualty clearing stations in the last war. But many of these front line anxieties, as Hadfield points out, are not true neuroses, but simple states of fear that pass away with the passing of the danger, and our aim should be to catch the cases before they pass on to the stage of amnesia, repression or dissociation. In fact, however, the average period between the time when a man first went sick with neurosis in this country and his admission to a neuropathic hospital was  $7\frac{1}{2}$  months ! Only 40 per cent. could be regarded as war casualties, and 19 per cent. were considered attribu-

table to war service. 82 per cent. showed constitutional or acquired predisposition; in 69 per cent. it was found in early childhood. In a more detailed investigation, only 3 out of 100 showed no psychological predisposition. Even among traumatic cases, very few were entirely due to the severity of present-day experiences. Many volunteered the statement that they had been nervous all their lives, and this was checked by a questionnaire sent to their parents which carefully avoided leading questions and elicited confirmation in 30 out of 37 cases. The figures confirm the expected inverse ratio between degree of predisposition and degree of aggravation necessary to produce breakdown. An interesting point is that a surprisingly high proportion were well adapted physically, to school, and to work; indeed, 41 per cent. were well adapted even to Army life, only 31 per cent. ill-adapted. In "mental life," however, they were relatively ill-adapted. One is justified, I think, in hesitating to accept these subjective self-valuations at face value; the soldier is particularly apt to see his civilian past through rose-coloured spectacles. Hadfield supports the view that "without a predisposition, circumstances, however bad, do not or rarely produce a neurosis." Even traumatic experiences may be "simply tags on which the patient conveniently projects his previously existing problems." There is no doubt much truth in this, yet one cannot but wonder what percentage of the population would be found free from such predisposing factors on diligent search. The results of treatment were rather disappointing; even the "Annexure" scheme did not absorb as many men as was expected, and the larger number had to be invalided. This result is attributed to the fact that 42 per cent. were regarded as having been unsuitable for the Army from the first.

Lewis and Slater (1942) investigated the medical records of 300 soldiers who had been returned to the Army after treatment at two E.M.S. neurosis centres, of whom 150 had subsequently been discharged, the other half being on full duty some months later. The traits found with significantly greater frequency in men who proved unsuitable for military duty were: a history of mental disturbance, including neurosis, in parents or siblings; unsatisfactory work record prior to enlistment; psychopathic traits of personality; symptoms of the present illness before enlistment; resentment or strong dislike of Army life; reluctance to return to Army duties; onset of illness without exposure to bombardment, continuous danger and other stresses of active service; querulous hypochondriasis; fugue or amnesia; and surly or paranoid attitude. Prognosis, they point out, cannot be safely based on the mere *number* of such traits a patient has; it depends also on their degree, and on the favourable attitudes discovered.

Aiken (1941) studied two groups of New Zealanders on a hospital ship conveying them home after the campaigns in Greece and Crete. A highly significant proportion had never been engaged in fighting. Of 55 cases, half were 35 years old or over, 20 were 40 or over. A definite previous nervous illness was found in 20 cases, and a family history in 22. The majority conformed to the accepted pictures of neurosis, most being anxiety states, the result either of long continued strain or acute shock. The hysterics presented largely cutaneous anaesthesias, paralyses being uncommon.

Curran and Mallinson (1940) report on 100 men admitted to the neuro-psychiatric unit of a naval hospital, and compare them with 50 surgical controls. Only 26 per cent. of the former had experienced enemy action. The type of reaction most commonly encountered was a mixture of anxiety and depression. There was not one classical case of conversion hysteria, though 13 were described as hysteria without anxiety; 20 were anxiety states, 7 anxiety with hysteria; there were 11 reactive depressions and 31 endogenous depressions, but only 1 obsessional, despite the extreme conscientiousness of many naval ratings. Though none were admitted as the direct result of head injury, 11 had a history of severe concussion—a fact suggesting that previous concussion predisposes to breakdown. It would not be surprising if the different type of personnel and the different type of stress in the Navy should tend to produce a rather different symptomatology, as this paper seems to indicate; the most striking feature is the high proportion of depressions. It must be remembered, however, that a large proportion of cases usually classified as anxiety states also show depression, and the number diagnosed under one heading or the other depends to a large extent on the bias of the observer. Another fact that detracts from the value of any such comparisons unless based on a very large number of cases is the marked fluctuations in the type of material coming into any one hospital at different periods.

Curran and Mallinson considered that 39 of the 100 breakdowns should have been predictable on the basis of family history, past history, personality, and physical factors. It was found that a high proportion of the cases not regarded as predictable showed a positive family history—a fact which suggests that more weight ought to be given to this factor. 33 per cent. were returned to duty. The authors discuss the very important question of the rehabilitation of those discharged, and the urgent need for an organization to help them find their way into work of national importance, of which the great majority are potentially capable.

Let us turn now to the neuroses associated with active warfare. Hubert (1941) reports his findings at a psychiatric centre in France during the active phase of the campaign. There was a steadily increasing amount of acute illness after the invasion of Holland, till finally admissions consisted almost entirely of conditions precipitated by bombing, shelling, etc. These cases were classified as:

(1) Anxiety states: Most had had previous anxiety symptoms recently. After some special ordeal, the climax came usually with "collapse," in which they showed uncontrolled emotion, followed by a brief period when they seemed paralysed with fear for some hours. After a few days there was an increasing tendency to dissociate fear and anxiety attacks from real happenings, the attacks occurring without the stimulus of a plane or other noise.

(2) Hysterical states: Most of these had no previous history, though some were of hysterical personality. The onset was usually sudden, without the prodromal symptoms seen in the anxieties. They often described a sudden collapse, usually at a time of intense stress; often the patient would lie motionless until carried off on a stretcher "unconscious." During the next few hours up to two days there was a transition from a negative semi-stuporose condition

to a hysterical picture. Often function would return save in one field, such as speech or vision. Gross tremor was common. Amnesias showed an unexpected feature, in that many could give a complete history at first, the memory becoming lost later.

(3) Psychogenic stupor: This followed stresses similar to those found in (1) and (2). Their previous history appeared uneventful and their Army records satisfactory. They were motionless, mute, and insensitive to ordinary stimuli, responding only momentarily and slightly to severe stimuli. There was no evidence of organic injury to the central nervous system. The more severe cases were incontinent of urine and faeces. There were a few features resembling catatonic stupor. The striking feature was their rapid recovery to comparative health, without neurotic or gross psychotic residual. "They would become, apparently, perfectly well, except for features not uncommon after a severe psychotic illness, such as pallor, poor appetite and sleep, and a mental state difficult to describe, but compounded of timidity and bewilderment."

(4) A very small mixed group with psychotic symptoms.

Sargant and Slater (1940) seeing a similar group at a slightly later stage after the evacuation from Dunkirk, give a description quite consistent with Hubert's. The patients showed signs of physical exhaustion, with an expression and attitude of tension and anxiety or listless apathy. Coarse irregular tremor was exceedingly common, sometimes resembling the extrapyramidal type, and there was often an immobile facies, so that some cases had been sent in as parkinsonism. Mentally they complained of sleeplessness, terrifying dreams, a feeling of inner unrest, and a tendency to be startled at the least noise, particularly anything resembling a plane. Many had more or less extensive amnesia, and other hysterical features were observed. The course was uniformly towards improvement, and the appearance changed strikingly within a few days, though the completeness of recovery was considered doubtful, as they remained easily upset by slight stimuli, sleeping uneasily, with bad dreams, and lacking their old self-confidence. The authors' remarks on prognosis are very properly guarded, their paper having appeared barely a month after Dunkirk; later experience showed that many of these men did not do nearly so well as was at first hoped, particularly if the attempt was made to return them to the Army. (See e.g. Sargant and Slater, 1941.)

Sutherland (1941) reports on 100 men admitted to an E.M.S. hospital suffering from psychoneurotic states occurring during or after exposure to combatant action. Of these, 12 were sergeants or warrant officers—a fact attributed to their greater age, and their rank having been given for technical experience rather than personal qualities. Thirty-seven were thought to have joined up with an unsatisfactory attitude or motive. Eighty admitted traits indicating previous emotional instability, 36 having had a definite psychoneurotic condition in the past, and none of these should ever have been exposed to combatant action. Of the 20 men with a good previous history, one group consisted of men over 35, another group, with a milder type of breakdown, were under 25. A family history was obtained in 53 cases.

It was found difficult to ascertain the extent of shock or whether concussion



had been present. Many reported amnesia, but the memory was easily recovered and most could recall the stimulus causing the loss of memory, i.e. there was no retrograde amnesia. There was one case of cranial injury, three of true concussion. Seventeen had been blasted, though few of these lost consciousness. The onset occurred mostly *during* battle, but a quarter developed marked symptoms after return to this country, mostly depression supervening on previous mild anxiety symptoms. The majority admitted readily that the illness began as a climax to a rising feeling of fear and strain under the process of battle, with increasing fear of loss of control. Different traumata evoked similar states, and the same trauma might give rise to different disturbances, depending on the subjective significance of the trauma and the make-up of the individual. Like Hadfield, Sutherland found an inverse ratio between the severity of the trauma and of the predisposition. There were three main groups: anxious, depressed and hysterical. Cases of effort syndrome were included with the anxiety neuroses, as they showed anxiety symptoms at some stage without exception, and in some cases it was possible to observe the development of an effort syndrome with corresponding diminution in the experience of anxiety (*cf.* Kardiner). Depression was dominant in 13, though in only 2 cases did a typical psychotic depressive picture with self-reproach develop. They had chiefly a feeling of futility and withdrawal of interest from the outside world, with irritability (again *cf.* Kardiner). Five were suicidal, and several stated that they would rather commit suicide than experience again what they had undergone. In this depressed group there was a previous history of pronounced emotional disturbance in 90 per cent. and a positive family history in 70 per cent. (not necessarily of depression, however, it would seem). Thirty-four had superficially complete hysterical conversion, denying any emotional upset. Their average intelligence was about two years lower than that of the other groups.

In general, then, it will be seen that there is a marked measure of agreement between different observers about the clinical pictures produced by active service conditions; moreover, there is a close correspondence with the pictures observed in the last war, as described by Kardiner and others.

#### IV. *Civilian War Neuroses.*

This subject, together with a number of others which have been touched upon in this chapter, has been dealt with by R. D. Gillespie in his recent book (1942). This book is so full of matter and covers so much the same ground as this chapter attempts, in a much more sketchy way, to do that it would be absurd to attempt to review it here, and the reader is advised to read it for himself.

The effect upon neurotic patients of the mere threat of war at the time of the Munich crisis in 1938 has received rather little attention. It was investigated by Glover (1941) by means of a questionnaire sent to psycho-analysts. It was found that the majority of patients reacted in some way, mostly by being "upset," but others by improvement in symptoms; a minority were unaffected. Most reacted with anxiety of varying degrees, but there were numerous other forms of reaction, and Glover thought that they reacted in accordance with

their clinical type. Lack of reaction seemed to occur independently of clinical type. Most of those who were relieved during the crisis, but also some who were frightened, reacted with depression or disappointment to the "peace." There was much difference of opinion as to whether analysis (previous and current) modified the reaction.

Observations in the pre-blitz year were largely negative, and such reactions as did occur fell into the same group as the Munich reactions. A Psychological Aid Centre set up at the Clinic of Psychoanalysis for the express purpose of dealing with war neurosis had only 29 consultations up to the time of Dunkirk; most of these came before the end of 1939. Half of them had no relation to war conditions, and six more had suffered from neurotic symptoms before the war.

Another investigation of the behaviour of chronic neurotics in the pre-blitz period was made by Rosenberg and Guttmann (1940), who examined 96 such patients who had been attending psychiatric out-patient clinics for at least a year before the war. This showed that by March, 1940, 17 had improved, 56 were unaffected, and 23 were worse. The criticism that the worst affected may have evacuated themselves is met by the fact that although 30 ceased to attend at the outbreak of war, all but 7 were followed up and accounted for. Obsessional, hypochondriacal, and chronic hysterical patients were outstandingly unaffected by the war. Those with mild depression or chronic anxiety showed themselves much more likely to become acutely ill under conditions of stress; those of the latter group who showed improvement were mostly those who had taken up work directly connected with the war, or who had become absorbingly interested in political events.

Wilson (1940) also found that his old neurotic patients did well on the whole. He refers to numerous states of anxiety seen in September, 1939, which soon subsided. The fall of France led to anxiety states, with symptoms largely referable to the stomach or thorax, also a growth of suspiciousness about "fifth columnists." During intense air-raiding there were fewer hysterical and neurotic patients than were expected. Early hysterical symptoms *in statu nascendi* were easily dissipated. Some patients were chiefly worried by the fear of breaking down in face of their friends and neighbours.

Pegge (1940) reported that of 29 cases seen after bombing, 9 had a previous history of neurotic illness (though 4 of these were considered mainly attributable to war stress); 10 were said to be nervous or highly strung; 3 showed no predisposing factors; 4 were mild psychotic or psychopathic personalities; 2 were complicated by concussion. The majority showed some derangement of consciousness, varying from a stuporous to a mildly dazed state. There was often some amnesia in those not unconscious or stuporous. Tremor was common, and was exaggerated on gunfire, being usually accompanied by uncontrolled emotional behaviour and weeping. There was only one localized hysterical paralysis, in a long-standing hysteric.

That these conditions are generally transient is suggested by Wilson's (1942) observation that of 134 cases of acute emotional reaction to air raids admitted to a first-aid post, only 6 returned for subsequent treatment. He found also that in 63 patients with subacute symptoms due to air-raid stress,

psychopathic traits were two and a half times as common as in controls; the controls were far more *conscious* of the fear excited by aerial bombardment. Admission and acceptance of fear is a safeguard against breakdown. This is a point of some importance, which the experience of others has confirmed.

Brown's (1941) observations on air-raid casualties showed five types of reaction: (1) acute emotional shock with tremor and other signs of fear, but no amnesia; (2) acute transient hysterical reactions—a limp semi-stuporose state in which they seemed to be groping for hysterical symptoms; (3) psychoneuroses, all hysterical, and rare in those who have previously shown no neurotic traits, these need a particularly horrible experience to precipitate this reaction, which occurs only after a period of meditation; (4) exacerbations of existing psychoneuroses, mainly in hysterics—but in some well-established psychoneuroses the anxiety or obsessional state gives a feeling of security against bombing; (5) psychoses of various types.

In general, then, experience shows that stable persons are unlikely to break down under the stress of bombing except in particularly trying circumstances; the unstable may react in different ways—a previously existing neurotic condition may be either exacerbated or improved, and a latent condition may be precipitated by the bombing.

Maclay and Whitby (1942) report remarkably good results from the in-patient treatment of 100 civilian neurotic casualties, even though the average duration of the condition on admission was seven months. Half of them had left hospital in two months. Altogether 48 were recovered or much improved, and 51 returned to their old work, 25 to light work. Their previous records were good on the whole. Eighty-six of them had endured severe mental stress as a result of bombing, and in 50 there was more than minor physical injury. Pension considerations were important in only 13 cases, and it was felt that the group as a whole were comparable rather to the "Dunkirk cases" among soldiers than to the compensation neuroses of peacetime.

Summarizing a fairly extensive survey of the incidence of neurosis in England under war conditions, Lewis (1942*b*) finds that air raids have not been responsible for any striking increase in neurotic illness. After intensive raids there is a slight rise in the total amount of neurotic illness in the affected area; neurotic reactions may not show themselves for a week or so and usually clear up readily. Hysteria is uncommon, anxiety and depression commonest. The incidence has been low in firefighters and other civil defence workers. These conclusions are partly based on careful statistical work derived from a London general practice, work which has been lately published in more detail (Whitby, 1943).

Fraser *et alii* (1943), investigating the population of a heavily bombed city, found that of the 35 persons who had been buried for over one hour, 66 per cent. developed "neurotic" symptoms, so that this may be regarded as a "normal" response to such an experience; the neurosis was persistent for ten months in about half the cases, i.e. about a third of all cases buried for an hour develop a persistent neurosis. These authors concluded that this is likely to occur when the personality is unstable and living conditions have become an abnormal strain, either due to general difficulties or to residence in the danger area

despite the absence of confidence. But the most interesting thing that seems to be established here is that the majority of the population is liable to develop a neurosis under certain conditions, and as often as not a persistent one. The question whether it is possible to develop a neurosis without a predisposition is thus answered very definitely, unless the concept of predisposition is to be stretched to the point at which it becomes meaningless. The question remains, however, whether these neuroses are of the same structure as ordinary psychoneuroses. The general opinion would probably be that they are, at least in the case of the persistent ones; but Kardiner would no doubt deny this, and much weight must be attached to his opinion, owing to the amount of intensive work he has done on the subject.

#### V. *Special Psychoneuroses.*

*Hysteria.*—Schilder (1939) discusses the concept of hysteria. He emphasizes that it is characterized by physical suffering, not accompanied by severe physiological and organic changes, nor by a deeper biological adaptation disturbance. As every type of neurosis has its physical side, the problem of conversion hysteria is not why the physical symptomatology appears, but why these particular symptoms make their appearance. Much confusion has been caused by failure to distinguish between the psychoneurosis, hysteria, correlated with the hysterical character, and on the other hand hysterical symptoms or reaction. "Every individual who has access to reality prefers under certain circumstances to forget this reality." There is always a real event at the basis of conversion, in which the body image always plays the most important part. Although the conversion is based on childhood experiences, the later organic trauma may be the nucleus and pattern for the formation of symptoms; e.g. amnesia and memory disturbances in patients who have suffered organic unconsciousness. Early organic ailments are also of fundamental importance in the relation to the parents, concentrating the parents' love on the child and increasing his dependence. "Reactive depressions are, according to their structure, hysterias in which the present situation plays an outstanding part." This is an interesting point of view, which should be compared with the recent tendency to see depression in hysteria (cf. Rickman, 1941).

Kennedy (1940) has made a thoughtful contribution to the subject of recent hysterical states, which he regards as a pathological exaggeration of a normal protective mechanism for gaining time in face of a reverse by "flight into activity, non-realization, and incapacity." "It might be said that anyone is a potential hysteric." Here it is useful to recall Schilder's distinction between symptom and psychoneurosis—Kennedy's statement is probably true only of the former. He offers a new classification of hysterical reactions based on (1) flight into activity—or inactivity (panic, terror, denial of consciousness); (2) transition states where relative freedom from anxiety is secured by symptoms which prevent full realization of difficulties or relieve the patient of the obligation of action (twilight states, fugues, amnesias, aphonia, astasia, pseudo-psychosis, etc.); (3) functional incapacity used as a means of retreat, but not permanently, as in chronic hysteria (paraplegia, aphonia, etc.). Kennedy points out that the difficulty in diagnosis is not in the differentiation from a wholly

organic condition, but in detecting important organic factors as a background to a hysterical state. In prognosis he lays stress on physical and constitutional factors, previous personality, intensity and duration of stress and extent to which the patients can be shielded from similar stress on recovery. Acute changes from the previous personality, such as panic and terror reactions, have the best prognosis.

*Amnesias and fugues.*—Sargant and Slater (1941) reported that no fewer than 144 out of the first 1,000 military cases admitted to the neurological unit at Sutton had loss of memory as a prominent symptom. Well over a half of these cases had been subjected to severe stress, and of all those exposed to severe stress, 35 per cent. had an amnesic syndrome. It was shown that terror, bomb blast and exhaustion may produce these conditions. Head injury was a factor in ten cases; but nearly a quarter of the psychoneurotic patients date their amnesic disturbances from concussion or from being blown over and dazed by a bomb. 32 men broke down in the absence of military stress, 28 of them having fugues; constitutional inferiority was found more frequently in these men. Among the normal men who broke down under stress there was found very frequently an outgoing type of personality, popular, fond of company, quickly responsive emotionally with somewhat shallow affect. Others showed paranoid tendencies, unsociability and poor energy output. Only seven out of 77 who passed through severe stress showed an association of amnesia with guilt; it was for the horrors and strains of retreat that forgetfulness was desired. But the paper does not attempt to determine what factors are associated with poor outcome, and leaves open the question to what extent prolonged neurosis may be due to such factors as guilt, or for that matter cerebral injury—a very important consideration both theoretically and from the practical, e.g. pension, point of view. The facts adduced, however, conclusively contradict Gillespie's (1942) sweeping remarks on the subject, in which he says amnesia is exceptional, and suggests shame or facilitates escape from the consequences of evasion of duty (p. 195).

Stengel's (1941) study of 25 cases of fugue seen in peacetime over a period of eight years gives an entirely different picture. Ten of these cases were related to epilepsy either in the patient or in his family, one was a schizophrenic, and the remainder were typical manic-depressives, hysterics and psychopaths. The three essential conditions for the production of these states were a tendency to periodic changes of mood, a disturbance of home conditions in childhood, usually affecting the relationship to the parent of the opposite sex, and a tendency towards the production of twilight states, most prominently in the epileptics.

*Fear and anxiety states.*—These have already been discussed at some length, but there are two further contributions to the subject which should be mentioned. Mira (1939a) made some suggestions about the relations between the different varieties of these states. Following Pavlov, he assumes that fear involves the predominance of a physical process of inhibition. Terror then corresponds to a general inhibition, leading to loss of movements and stopping of mental activity with eventual loss of consciousness. Panic is related to "cortex" inhibition with secondary excitation of the midbrain, leading to aimless



automatic movements, occasionally of great strength. Anxiety is a mixed state, with conflicting inhibition and excitation at different levels. Thus, terror leads to stupor and catatonic states; panic to twilight states, impulsive fugues and confused agitation; anxiety to hypochondriacal states, obsessional (phobic) symptoms, and hysterical fits. All may lead to conversion symptoms, especially parietic ones, neurasthenic symptoms and slight retardation.

Mira (1939b) also described a malignant type of anxiety which he called "psychorrhaxis"; 100 such cases were observed in Spain, making 2-3 per cent. of all psychiatric cases. They showed anguish and perplexity rather than fear or excitement. The pulse was permanently above 120, respiration above 40. At the end of the first week the temperature rose very quickly, the general condition became worse, the tongue became ulcerated, with slight jaundice and a tympanitic abdomen. They became restless, developed automatic movements, carphologia, subsultus tendinum and facial spasms. In fatal cases death occurred after three or four days. Unfortunately there were no necropsies. The predisposing conditions were previous lability of the sympathetic, sudden severe mental shock in conditions of physical exhaustion, and long delay before starting sedative treatment. No one has reported anything similar in this country, though one would have thought that the conditions at Dunkirk might have reproduced many of the factors operating in Spain.

Finally, Palmer (1941) discusses the acute anxiety attack, which, as he points out, is referred to by the neurologist and cardiologist as a vaso-vagal attack. The setting in which the attacks occur is of the utmost importance. First, as to diathesis: "Where there is a family or personal history of epilepsy, migraine, asthma or hay-fever; where the attacks are occurring with a fairly regular periodicity; where the attacks are fulminating and punched-out in expression; and finally where their occurrence is more frequent than twice a week, we may assume that the patient is so diathetically predisposed to their occurrence that an intensive psychological approach is likely to be disappointing." Secondly, the setting of psychic morbidity is important, i.e. to what psychiatric group does the patient belong if the condition is psychogenic. Such attacks occur in anxiety states, in the phobic-obsessional group, in certain alcoholics, in hysteria, hypochondriacal, functional cardiac states, and in a psychotic group.

If well founded, the author's conclusions about the contra-indications for psychotherapy would be most important, and just the kind of thing we need; but it is not clear on how much evidence his conclusions are based, and one feels they are somewhat *ex cathedra*. He quotes 11 cases, but most of them are not relevant to this particular question of diathesis.

Considerations of space forbid the discussion of numerous other interesting topics, in particular the psychosomatic disorders, which would require a chapter to themselves. One group of them is dealt with, however, under the heading of "Effort Syndrome."

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