NEUROTIC SYMPTOMS IN THE ELDERLY.

A THESIS SUBMITTED FOR EXAMINATION FOR THE DEGREE OF DOCTOR OF MEDICINE, GLASGOW UNIVERSITY, BY CARRICK McDONALD, M.B.,Ch.B. (Glas.).

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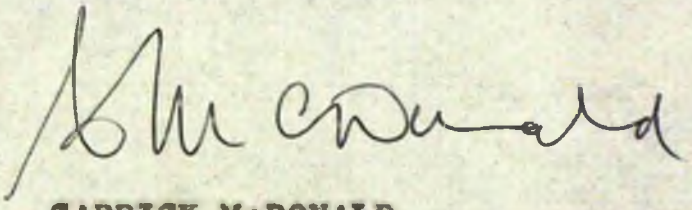
AUTHOR'S STATEMENT.

To certify that all the work described in this thesis is my own, with the exception of the analysis of covariance as attested in the acknowledgments.



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PREFACE.

A survey of the major textbooks of psychiatry showed that scant attention was paid to the psychoneuroses occurring in old age. The literature contains adequate prevalence assessments, and shows that these conditions have a high occurrence rate in the over sixty age group. It seemed worth while to embark on an exploratory study in this area, firstly because of the outstanding lack of factual information available, and secondly, because this age group may prove to be the crucial one, on which the theory of the childhood psychogenesis of the neuroses, could stand or fall. By definition, any study on a geriatric problem must separate the effects of the ageing process from those of the variable under examination. This was done in the first phase of this study, allowing the second phase to concentrate on the clinical aspects of the problem. The information gathered was grouped in ways which allowed it to be treated statistically, and efforts were made to keep any subjective judgments "blind". It was shown that neither age nor the brain damage commonly associated with age, affected the extent of the neurotic tendencies shown by the subjects. Clinical differences were found between old people with mild affective symptoms and those with other neurotic symptoms. Affective symptoms seemed to be the main criterion deciding if these patients should be admitted to hospital but the neurotics in general showed little

in the way of social correlates, either cause or effect. A validation study of two measures of "neuroticism" was performed simultaneously, and the findings suggested subtelties of clinical interpretation of scores on these tests.

The work advances factual knowledge both in the clinical and psychometric problem of the psychoneuroses of the elderly. It gives theoretical reasons for treating the mild affective illnesses as an autonomous group. It presents the first factual account of the natural history of neurosis in old age. Most important, by separating brain damage effects from neurotic symptom production in the elderly, it prepared the way for a fresh, optimistic approach to the treatment of these symptoms.

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REVIEW OF THE LITERATURE.

"Age brings all things with it, and takes all things away with it; all things have time and time has all things." Anon.

PREAMBLE:

The literature related to the subject of neurosis in the geriatric age group is reviewed here. Five chapter headings have been used to indicate the scope of previous work. A chapter on epidemiology has been included although this work is not concerned with incidence or prevalence rates. Similarly there is a chapter on the range of treatment available although no assessment of any treatment was undertaken in the work. The two chapters were included to demonstrate the dimensions of the problem tackled, and to indicate how inadequate are our present ways of tackling this problem.

Chapter 1: Epidemiology.

In 1948 Sheldon completed his classical study of the prevalence of psychiatric population. He made a questionnaire assessment of 470 old people and found that 3.2% were "eccentric", and 11% apathetic and displaying "morbid anxiety". This study represented a major exploration of virtually unknown territory and inspired other workers to follow in Sheldon's footsteps. Greenless and Adams (1950) found that 25% of a random geriatric sample required regular medical attention of some sort. Suicides rates, published by Batchelor and Napier (1953), showed that 20% of suicides were over 60 and this illustrates the serious nature of the mental illnesses in this age group. They claimed that a large percentage of these people suffered from depressive illness and thereby undermined the idea that geriatric mental illness could be ascribed to organic senile or presenile dementing processes.

Table 1 shows the major prevalence assessments for neuroticism. In this group it is helpful to combine the rates for psychoneurosis with the rates for character disorder as the distinction is often arbitrary or at least dependent on the individual worker's criteria.

TABLE 1. Major Prevalence Assessments.

Worker	Year	Total Cases	Age Group	% Neuroses	% Character Disorder	% Combined Rates
Bremer	1951	119	60+	5.0	12.6	17.6
Essen Møller	1956	443	60+	1.4	10.6	12.0
Primrose	1962	222	65+	10.4	2.2	12.6
Nielson	1963	978	65+	4.0	4.7	8.7
Kay et al	1964	517	65+	8.9	3.6	12.5
			Total	29.7	33.7	63.4
			Mean	5.94	6.74	12.68

It will be seen that there is quite good agreement in the assessment and a mean figure of 12.68% for the combined rates is obtained.

If one looks for a further breakdown into the prevalence of the various diagnostic subgroups of the neuroses fewer figures are available and these figures become more difficult to interpret because of unreliability of diagnostic criteria. Busse (1961) found 56 psychoneurotics in a volunteer sample of 650 "normals". 25 of these were severe, and of these 16

were hypochondriacal and 12 showed depressive manifestations. Perlin and Balter (1963) similarly examined 47 volunteers, normal in the sense that they were surviving in the community without medical help. They found that 62% presented diagnosable functional psychopathology: 19% showed depressive reactions, 28% had psychoneuroses, and 28% warranted multiple diagnoses. The possibility arises that a volunteer sample preselects for mental ill health, but the proportion of depressive reactions to psychoneuroses is still worth noting.

Kessel and Shepherd (1962) have shown that while the prevalence of neurotic disorder continues to rise slowly in the over 65 age group, the incidence of hospital admissions drop sharply from 60 onwards. Shepherd et al (1959) analysed attendances at a general practitioner's surgery and found that conspicuous psychiatric disability, abnormal personalities, illness without physical cause, stress disorders and psychosomatic disorders, respectively accounted for 9%, 5% 14% and 12% of the 911 people at risk. A cohort of 150 patients over 60 admitted to Grailingwell Hospital was studied by Roth and Morrissey (1952). They found that 54% suffered from affective psychosis and none of the patients presented a psychoneurosis!

Having looked at prevalence rates and incidence rates it is well to remember that these rates are only a very indirect measure of the social pressures on, and the social

effects of, an illness. Other factors are highly relevant.

The percentage of old people in the community is on the increase. Folsom (1940) has produced figures to show that in the United States of America the over 65s will constitute 14.3% of the population in 1980, whereas in 1930 they represented 5.4% of the population. The total effect of illnesses in the geriatric age group is therefore also increasing. Lewis (1955) has emphasized the importance of this point when he claimed that it was social pressures, past and present, which rendered the patient unfit to cope with the changes inevitable in late life. In addition he (1943) calculated that in the next thirty years elderly patients will be responsible for the bulk of admissions to mental hospitals.

These social pressures affecting old people have also been described in the literature. Durham (1945) has drawn attention to the marked contrast in social attitudes towards old age existing in, for example, the U.S.A. and China. In China there is a strongly patriarchal family structure and sons support their parents alternately. This contrasts with the "urban" attitude prevalent in the U.S.A., in which old age is "unproductive" and a burden because of decreased talents and abilities. Busse (1961) studied 222 "normal" subjects over 60 and found that "isolation" was a factor in producing psychoneurosis in the upper social classes. Geographical mobility in the children of this class meant that these

subjects were disappointed in their expectation of living near their children in their old age. In contrast Farris and Dunham (1939) found that in Chicago, high rates of senile psychoses appeared in areas of high mobility and poverty. Hollingshead and Redlich (1958) claim that, unlike hysterical reactions, character neurosis, phobic anxiety reactions, and obsessive compulsive reactions all diminish significantly with social class. It must be noted that this last work refers to people who were being treated, and may not reflect a prevailing association in the community.

To summarise; any psycho-geriatric problem is potentially a social burden since the percentage of elderly people is on the increase. There is an appreciable prevalence of psychoneurosis in the geriatric community but the rates of presentation are dramatically different from this. This difference between prevalence and incidence indicates that psychoneurosis has some subtle effect on individual or community but is not measureable in terms of hospital admission. The literature pertaining to this problem will be reviewed after the natural history of the condition has been studied.

Chapter 2: Natural History.

The natural history of psychoneurosis in old age must be regarded as only tentatively delineated, since we cannot be sure that we are dealing with a pathologically homogeneous group. Remembering this fundamental reservation, workers have thrown light on the clinical aspects of the condition and these contributions will now be described.

Considerations of the aetiology of the psychoneuroses of old age are bedevilled by bias introduced in the theoretical background of the worker. The "organic" school of thought see the illness as produced by structural changes in the brain which may or may not be measurable at the present state of our knowledge. The psychogenic theorists, on the other hand, are divided into those who see the neuroses as reflecting psychic conflicts introduced in the patient's formative years, and those who see the symptoms as distortions or exaggerations of mechanisms used in the normal learning process. In addition there is a large school of thought which attributes neurotic disorders to hereditary factors. Rees (1949) found that of 2,000 neurotic women, 58% had a positive family history of neuroticism, but 70% of the subjects suffered from an affective disorder. Slater (1953) showed that in uniovular twins, 2 pairs out of 8 were concordant for neurosis and of 43 binovular twins 8 pairs were concordant for neurosis. Once again, his group of neurotics was "contaminated" with patients with affective

symptoms and some workers would claim that neurotic depression was not a valid concept. Slater further found that 78% of his neurotic twins had a psychopathic first degree relative.

Regarding the aetiology of neurosis in old age in particular, there are three main theories current. Cameron (1956) has said, "The average graduating physician almost invariably looks upon neurotic manifestations appearing in later senescence as signs of inevitable decay". This is hardly surprising since text book descriptions of the senile and presenile psychoses list and emphasize neurotic type symptoms. Mayer-Gross (1954) points out that a hypertensive crisis or the personality change associated with hypertension may often be wrongly attributed to a neurosis. He describes hypochondriacal self scrutiny and anxiety as features of arteriosclerotic psychosis. Similarly, Rothschild (1956) lists irritability, anxiety, and apathy as signs of senile psychosis. Thus the student is led to believe that neurotic symptomatology in old age is caused either by the ageing process itself or by some underlying organic dementing process.

The second aetiological theory is dependent on the regression mechanism. This theory holds that the old person, in the face of new stresses inherent in his life situation, regresses to infantile modes of behaviour. An examination of the psychodynamic models dependent on this mechanism will

be undertaken later, mention here will be made that Lewis (1955) attacks the concept of regression on the grounds that it neither describes nor explains what actually happens.

A third aetiological theory could be called the "uncovering" theory. The neurotic tendency is assumed to have been present in trait form throughout life and is unmasked in old age either by stress (Noyes and Kolb 1958) or by organic brain damage (Mayer-Gross 1954). Some investigations support this hypothesis. Slater (1943) found a positive correlation between hysterical reactive states and hysterical personality traits and Rees (1949) found that 46% of 2,000 neurotics had shown a neurosis in childhood. Vispo (1962) examined 25 normal controls and 25 ex-psychiatric patients over 60 and considers that there is a difference in the previous personality between persons considered to have a normal ageing process and those who had a mental breakdown in senescence. The latter were found to "show a diffusion of neurotic tendencies". On the other hand Benain (1956) examined the case histories of 46 patients over 60 with obsessional symptoms. Only 18 had always been obsessional, and he noted that 44% of these were celibate. Lawton (1939) sums up the majority opinion "a young neurotic becomes an old neurotic if not cured by life or psychotherapy."

Finally, without necessarily claiming aetiological implications, it is wise to note that Roth and Kay (1956) found physical disability present in 60% and chronic physical illness present in 40% of patients admitted with affective

illness in the senium.

There is little written about the course of psychoneurosis in the elderly. Clow and Allen (1951) examined the case histories of 67 in-patients over 60 with a primary diagnosis of psychoneurosis. 23 had never had a clinical episode of emotional disorder until after the age of 60. There was a family history of psychoneurosis or "instability" in 11 cases and of psychotic reactions in 10 cases. Only 9 cases suffered from hypertension and after a median follow up period of 18 months 47 out of 57 cases were recovered or much improved.

Similarly, the prognosis of the condition must be inferred from long term follow up studies.

Table 2 shows a selection of follow up studies performed a minimum of 10 years after the psychoneurotic breakdown. It will be seen that the scatter of percentages cured or definitely improved, ranges from 31+ to 77. However, these results apart, there is a fair degree of agreement, and the mean figure works out at 55%

In addition there are two prognostic studies pertaining

TABLE 2. Selection of Long Follow-up Studies.

Worker	Year	Total Cases	Follow up Period	Clinical Presentation	% cured or definitely improved
Harris	1938	123	10+ yrs.	Anxiety States	31+%
Wheeler et al	1950	153	20 yrs.	Neurocirculatory astheina	47%
Müller	1953	57	25 yrs.	Obsessional neurosis	49%
Rennie	1953	240	20 yrs.	Mixed neuroses	66%
Zeigler et al	1954	48	20-25yrs.	Hysteria	46%
Eitinger	1955	123	10 yrs.	Mixed neuroses	54%
Conestrini et al	1957	50	10 yrs.	Mixed neuroses	68%
Erast	1959	120	20 yrs.	Mixed neuroses	77%
				Mean	55%

to people over 60. In 1952 Roth read a paper describing the prognosis of mental disorder in old age but did not include

psychoneurosis. The explanation being that his was a mental hospital population, and as we have seen, the incidence in mental hospitals is very low. Colwell and Post (1963) followed up 20 patients 2 years after they had suffered an "affective illness with a neurotic admixture". 4 cases were completely symptom free, 8 had continuous or intermittent mild symptoms, 2 were intermittently disabled, and 4 were continuously disabled. These figures agree well with those we deduced from the long term follow-up studies listed above.

Chapter 3: Effect on the Community.

The effect of the psychoneuroses of old age on the community will be examined here, since their effect stems from epidemiological considerations coupled with the form of the illness, and these aspects have now been dealt with.

Age specific suicide rates show a high incidence in the 6th and 7th decades of life and Dewhurst (1947) has argued that this rate has remained constant over a time when the social stresses on old people had increased. These facts led people to examine more closely the subtle inter-relationships between psychoneurosis and society.

There is a body of evidence which shows that society is well able to tolerate old people suffering from psychoneurosis. Perlin and Butler (1963) examined 47 normal volunteers over 65 and found that the psychopathology which they showed - psychoneuroses, personality disorders and depressive reactions - was not associated with serious impairment of their functioning in the community. Sainsbury, (1963) in an elegant controlled study comparing 271 families under community care with 139 families involved in hospital care, found that people over 65 accounted for 66% of existing serious family problems. Of neurotic patients in the study, only 45% caused hardship in terms of effects on income, employment, disruption of domestic routine and social activities, and disruption of the health of household members and relations with neighbours. A random survey of old people was performed in Edinburgh

and after interviewing 200 persons over 65, Gray (1964) concluded that a high proportion suffered from some form of mental disorder and that much of this disorder had not even reached the notice of the general practitioner. Parsons (1962) sampled 228 old people in Swansea and concluded that men, if they survived, were mentally healthier than women.

We have shown that the incidence of admissions of old age neurosis to hospital is very low. Any prevailing cases in hospital might be largely accounted for by Corsellis's (1962) finding while studying 300 post mortems in a mental hospital. There were 5 who had been psychoneurotic or psychopathic and the average age of onset was 49 years, with an average duration of illness, onset to death, of 18.1 years. This would bring this type of neurotic well into the geriatric population of the hospital. (In a personal communication, Corsellis has confirmed that he found nothing pathological in those five brains). If the bulk of old age neuroses do not reach hospital, by examining social reasons for admission to a geriatric hospital we can infer negative social effects of the conditions. That is, what effects the neuroses don't have. Lewis (1943) investigated 25 male and 25 female consecutive admissions to a geriatric hospital and found that 15 had children who could have supported them, 33 had personality disorders, 14 were financially insecure, and 8 were suffering from dietary deficiency.

The possibility remains that geriatric neurotics are not tolerated either living independently in the community or living in a two or three generation family, but are disposed of by placement in Old People's Homes. Ginzberg and Brinegar (1953) examined 126 old residents in County Homes in Iowa, and found that 43 had come from mental hospitals and none of these were diagnosed as "neurotic". Wanklin et al (1958) compared 242 old residents in homes with 153 patients in a geriatric psychiatric hospital. 21 of the patients suffered from mental disorders other than senile or arteriosclerotic psychoses, while of the residents of the homes, only 151 were classed as having been completely free of psychiatric symptoms on admission.

From the literature, then, we cannot be certain that neurotics over 65s are not forced out of the community into old people's homes, but we do know that they are not considered severe enough to warrant mental hospital admission. This may be because the illness is mild in old people, because old people tolerate the discomforts of neurotic ill health better that young people, or because the extent of the problem in the community is unrecognised.

Chapter 4: Psychopathology.

Little enough is known of the statistically normal mental life of old people. Assumptions were made about the effects of "crystalline" and "fluid" abilities but Welford (1958), in a comprehensive analysis of the sensori motor performance and the learning difficulties of old people, has been able to show that their potential abilities are much greater than had been assumed. The lesson to be learnt is that sweeping generalizations should not be made from the few hard facts we have.

What of the normal social relationships and behaviour of the senescent subject? Lewis (1940) asked the question, "Is senescence an organismic or a cellular process?", and workers describing normal old age can be divided into those who favour one or other hypothesis. Those seeing senescence as an "organismic" process see old people in various degrees of adjustment to the social pressures to which they are subjected, and those favouring the "cellular" hypothesis see the old person as coming into conflict in so far as the physical damage of senescence causes friction between himself and his environment.

If we begin at the "organismic" end of the scale and work towards the "cellular" end, we must mention firstly Allen (1949) who takes the biological view that in old age the drive for race preservation abates and self preservation strengthens. Next come the descriptive studies, Bethnal Green's

old people were studied intensively by Townsend (1957). He emphasized the three generation family life built round the female line. Only 21% of his random sample of 200 people were living alone and the widowed state was vulnerable in that it carried a higher death rate than other civil statuses. Yarrow et al (1963) studied 47 male volunteers and found that only 8% had no immediate family members alive. The family was the focus of their lives, and in general, they had not changed the pattern of their socializing activities in moving from middle to old age. 20% showed a deterioration of inter-spouse relationships and father - child relationships. This last effect was diminished in those men who had had a good education. Busse (1954) found that 50% of both a group of hospitalized old people and a community group retained a sexual drive. The concept of inherent pathology begins to emerge when Flugel (1921) claims that the old tend to live vicariously and project their own lives into those of their children and grandchildren. Goldfarb (1959), after saying that psychoneurotic behaviour of all kinds is found in aged persons, proceeds to say that fluctuations in clinical states due to brain damage make differences between psychoses and psychoneuroses "even more vague". Perhaps the ultimate "cellular" position is stated by Busse (1961) when, having claimed that the psychoneurotic old person was younger, than

the "normal" old person, proceeded to suggest a negative survival factor for psychoneurosis in old age!

Attempts have been made to measure the attitudes of the aged. For example Guertin (1961) performed a factor analysis on attitudes expressed by 48 elderly residents of a Veteran's Administrative Centre. 5 important factors emerged.

1. Anxiety - dysphoria
2. A feeling of alienation.
3. A position of preserved interest in the environment.
4. Introspective focus on the subject's own physical complaints.
5. Expressions of incapacity.

Weiss et al (1961) used a 70 item questionnaire and showed that the greatest frequency of complaints of old people related to economic and occupational situations, but people in their 70s showed a marked tendency to complain about situations which represented gross distortions of reality. Kahn (1958) attempted to correlate somatic preoccupations and a specific figure ground response, but obtained a wide scatter of responses by his control group. There is no doubt that there is a physiological ageing process which may or may not run parallel with chronological aeging and Busse et al (1954) have demonstrated a high percentage of focal dysrhythmias primarily in the left temporal area, seemingly unrelated to impairment of psychologic functioning.

The antecedents of geriatric attitudes have also been studied. Bloom (1961) measured the degree of "self acceptance"

of 83 male patients awaiting minor surgical operation. When the results were plotted against age "self acceptance" was found to increase till the age of 49 and thereafter to decrease. Physical and mental disability were assumed to be the stereotype of old age by Arnhoff et al (1960). Using 112 items extracted from the Cornell Medical Index, they asked 152 undergraduates to answer in terms of their present condition and secondly in terms of how they saw themselves in old age. They found that the students' concepts of their agedness related to the way they saw themselves at present. If they presented multiple minor ailments, they thought that their old age would be disease-ridden and vice versa.

We will now proceed to a consideration of the psycho-dynamics of neurotic illness in old age. Here we find a continuum of descriptive models from empirical descriptions of social relationships through mental mechanistic inter-pretations, to psychoanalytic explanations.

Perlin (1958) emphasises the dependence of the aged emotionally disturbed person and demonstrates that this dependent patient causes least friction in a Home. Masserman (1957) sees the illness inherent in all old people, each one of whom attempts to compensate for his declining powers and status. He does this in socially acceptable ways by defending philosophical systems which promise immortality and by trying to retain the diminishing human relationships

available to him. Impaired flexibility and acquired inhibitions are seen by Goldfarb (1953) as leading to fear and hence to further inhibition and impairment of function. The old person is thus in a viscious circle with no means of escape. Krapf (1953) agrees, and blames excessive habituation for the lack of initiative and adaptability which cause neurotic conflict. He describes "self projection panic", or "time anxiety". The older one gets, the less future exists, and this feeling of being on the brink of eternity brings its panics and disorganised behaviour. Hypochondrias has been directly attributed to the feeling of general impairment by Schilder (1940), who sees the fear of death as a castration anxiety.

Kaufman (1958) has stated an analytic view of depression in old age: the menopause is a narcisstic injury with a compensating heightening of the libido followed by a devaluation of genital interests, with reversed oedipal fantasies and hence depression. Kaufman (1940) also thinks that through the reversed oedipal fantasies, the old patient sees his son as his father and his daughter as his mother, and may act accordingly. Regression is invoked by Hamilton (1942) as the mechanism producing return to oral eroticism in the aged - he puts it epigrammatically: "after middle age one tends to dig one's grave with one's teeth."

Experienced clinicians have pointed out that, in addition to specific psychodynamic processes for old age, there is a

modification of the quality of symptoms presented as people grow older. It is agreed that pure anxiety states are rare and Diethelm and Rockwell (1943) write that anxiety may be expressed as mild insecurity feelings, agitation, depression with fear and panic phases, depression with limited activity and "frozen affect". Goldfarb (1955) ascribed this symptom modification to the fact that old people are anhedonic - having a decreased capacity for affectionate relationships, their thoughts and behaviour (and symptoms) are polarised round dominance and submission. The submissive quality is very marked in the most common old age syndrome of all, hypochondriasis. This Rockwell (1945) ascribes to insecurity. Insecurity, he says, leads to tenacity and over cautiousness, and the outcome of impaired physical security in old age is hypochondriasis. Busse (1961) found over half the residents (total 222) in a North Carolina community of over 60s who showed mixed depressive - hypochondriacal symptoms had shown quite different psychoneurotic symptomatology earlier in life. That symptoms should be looked at in their social context has been emphasized by Howells (1962) with his concept of the nuclear family, and Post (1958) described a family neurosis where the mother became hypochondriacal when the daughter, with whom she was living, became anxious.

Chapter 5. Treatment.

The treatment of the neuroses of old age has reflected an overwhelming pessimism, both in terms of expectation of results and of drive in the application of a wife variety of treatments. No objective estimate of the relative values of treatments used has been found in the literature, nor is there any statement of the results obtained by any single method. The literature, then, consists simply of stated opinions regarding the treatment of neurotic symptoms in geriatric patients.

PHYSICAL TREATMENT

Since symptoms denoting a mild affective disturbance come within the scope of this study, it is relevant to mention the work of Roth and Kay (1956) in investigating affective disorders arising in the senium. They found that 60% of their cases had a physical disability on presentation, and that 40% of cases suffered from a chronic physical illness. No claim regarding causality is made for these figures but they emphasize that the need to strive for the patient's physical well-being must be a constant preoccupation of the geriatric psychiatrist.

TREATMENT BY ANALYSIS AND PSYCHOTHERAPY.

In 1904 Freud wrote, "If the patient's age is above the fifties the mass of psychological material can no longer be thoroughly inspected, the time required for recovery is too long, and the ability to undo the psychic processes begins to grow weaker."

While this dictum has enormously influenced the selection of patients for analysis, counter claims have been made about these three contra-indications as seen by Freud.

Lawton (1946) points out that Freud has countered a cogent criticism of material produced in analysis, by saying that it is not the factual or real life situation which influences a patient's mental life, but the situation seen by the patient. Can one then discard as therapeutically useless material, the aged person's memory of his past life, simply because one knows his memory is failing?

Goldfarb (1955) has made bold attempts to counter the second objection to psychotherapy; that the time required for recovery is too long. He defines the aims of psychotherapy as :-

A. the restoration of a state of comfort and self satisfaction, in which there is dignity and self esteem.

B. the restoration of a modicum of productivity.

C. the restraint from unreasonable aggression which may provoke retaliation.

He treats his old patients with fifteen minute psychotherapy sessions, once or twice per week, and claims that this treatment affords help to the patient with a neurosis of old age (1953). He describes the relationships which ensue, and which help in some undefined way. He claims that the patients do not desire "consummation of their problems" but use the interviews to "beat the therapist." The old person cannot use affection to form the relationship, so he manipulates the therapist by excessive demonstrations of dominance or submission. Similarly, although affection cannot be mobilised by the therapist for his own ends, he can create pleasure in his patient by carrying him to a solution of some of his problems.

Rockwell (1945) attempts to circumnavigate the weakening of the ability to undo the psychic processes, by advocating distributive analysis in all geriatric neuroses.

The polarity of opinions in the matter of psychotherapeutic treatment is exemplified by Abraham and Jelliffee. Abraham describes the successful analysis of four neurotic patients over the age of 50, (1953) and Jelliffee (1925) says "the neurosis or psychosis was a better solution of their life difficulties than any that I, as an agent of reality, could offer."

TREATMENT BY GROUP PSYCHOTHERAPY

Linden (1953) described treatment by group psychotherapy of aged female patients in a state mental hospital in the United States. He describes the dynamics of the relationships developing, but his group situations were so unstandardized that he himself describes the process as "opportunistic group therapy".

Rechtschaffen, Atkinson and Freeman (1953) instituted a combination of individual and group psychotherapy in another state mental hospital. In addition there were occupational therapy and work therapy services available. The discharge rate for their geriatric patients increased by 300% but this coincided with an intensive effort to rehabilitate patients outside hospital whenever possible.

TREATMENT BY ENVIRONMENTAL MANIPULATION

It has been variously advocated that assaults be made on the patient's environment or on his mode of coping with that environment. The logical time to start such manipulation is before the neurosis of old age develops. Zeman (1951) suggests that we are prepared for old age by being taught in middle age "how to live and grow intellectually". He advises the cultivation of new hobbies and encourages the belief that the expectation of a sexual life is well over the sixtieth year.

Wayne (1955) feels that retirement precipitates varying psychological reactions in people for whom work is an

obsessive-compulsive preoccupation. He refers to retirement as a "psychologic catalyst for death". The psychopathological traits in the patient should be given scope for sublimation. Thus the compulsive should be given something like type-setting to do, the exhibitionist given finger painting, and the aggressive patient set to fashioning sculptures. Wayne goes so far as to claim that senility is a psychosomatic disorder in which a true organic deterioration is precipitated by retirement.

Dr. Lillien J. Martin anticipated Dr. Wayne by founding the San Francisco Old Age Counselling Centre after she herself had retired. Treatment here was by means of brief directive sessions making use of slogans and addages, "Sweep the cobwebs out of your mind". She ran small social groups meeting once in eight weeks, and found that these allowed her patients to react freely in a permissive and understanding atmosphere.

Welford has made an important contribution to the means available to the old person to cope with his environment (1958). Essentially he has shown that when the aged person's defficiencies and assets are under stood and catered for, the potential capacity, in terms of intellectual ability and motor skill, is much greater than cursory testing would indicate. This position is adopted by Hollender (1951) when he claims that old people can and do learn new things, and should be given occupational

therapy as much like work as possible.

Lawton (1946) would treat the patient in the nexus of his family, by explaining the different generations to each other and to themselves. In the case of an aged person with no religious belief adequate to combat the fear of death, he would offer a substitute philosophy such as that of "death the peace bringer". In 1941 he also underlined the value of the "School for Maturates" in Oklahoma.

Finally mention must be made of the "Amsterdam Plan", in which 3,000 patients from a population of one million are treated in their homes by a visiting psychiatrist or psychiatric social worker. The plan includes provision for six homes each of 150 beds for geriatric patients (1960). This community centred approach is also advocated by McMillan (1960), who believes that day hospitals should be used to relieve relatives of their elderly relatives, with short term admission to hospital as an extra buffer between the patient and irreversible rejection by his family.

INTRODUCTION TO METHODOLOGY.

The investigation was carried out in two phases. Phase I was designed primarily to discover the most fruitful population source of neuroticism in elderly people. It was assumed that organic brain damaged patients would have to be excluded after the brain damage had been shown to contribute to their neuroticism. To identify brain damaged patients the Inglis Paired Association Learning Test was used, while the 'N' score on the Maudsley Personality inventory gave a measure of 'neuroticism'. ('Neuroticism' will henceforth describe a hypothetical state which results in a score of over 19 on the M.P.I. N scale or a score of 10 or over in the Cornell Medical Index N scale). A number of samples of old people then completed the two questionnaires. The materials, methods used for testing, and the results will be described in detail in the next section of the work.

Phase II of the work relates primarily to a clinical assessment of this and further case material. In addition, the Cornell Medical Index was used as an additional measurement of 'neuroticism' in the hope of providing a cross validation study.

Since Phases I and II were executed independently they will be described independently.

The general aim of the study was to explore the nature of neuroticism in old age and not to repeat the epidemiological studies already done. It was therefore felt desirable to find case material which would allow of inter-group comparisons,

rather than rely on material from a random sample. The result is a rather complicated series of groupings, which gives flexibility in answering specific questions arising from the review of the literature. In order to guide the reader through the maze of abbreviations which are necessary to prevent unwieldiness, the explanation of any given abbreviation can be found under GROUPS in Appendix I. This sheet folds out to allow of constant reference. In addition the Groups and their abbreviations are defined at the beginnings of the relevant sections of the work.

Table 3 gives an outline of the scope of the work. Details are presented in the descriptions pertaining to Phases I and II.

TABLE 3. TOTAL SCOPE OF THE WORK.

	R.S.1	R.S.2	R.S.3	S.S.1	S.S.2	N.I.P.	H.S.	P.O.P.S.	M.O.P.S.	Total
Case History		15	33		13					61
Mental State		15	33		13					61
Cognitive Screening		15	33		13					61
Social effects table		15	33		13					61
M.P.I.	20			20			20	6	2	68
Inglis P.A.L.T.	20			20			20	6	2	68
Mill Hill Synonyms	20			20			20	6	2	68
Cornell Medical Index		15	33		13					61
86 Information 'Bits' coded from history		15	33		13	73				134
GROUP TOTAL	21*	15	33	20	13	73	20	6	2	

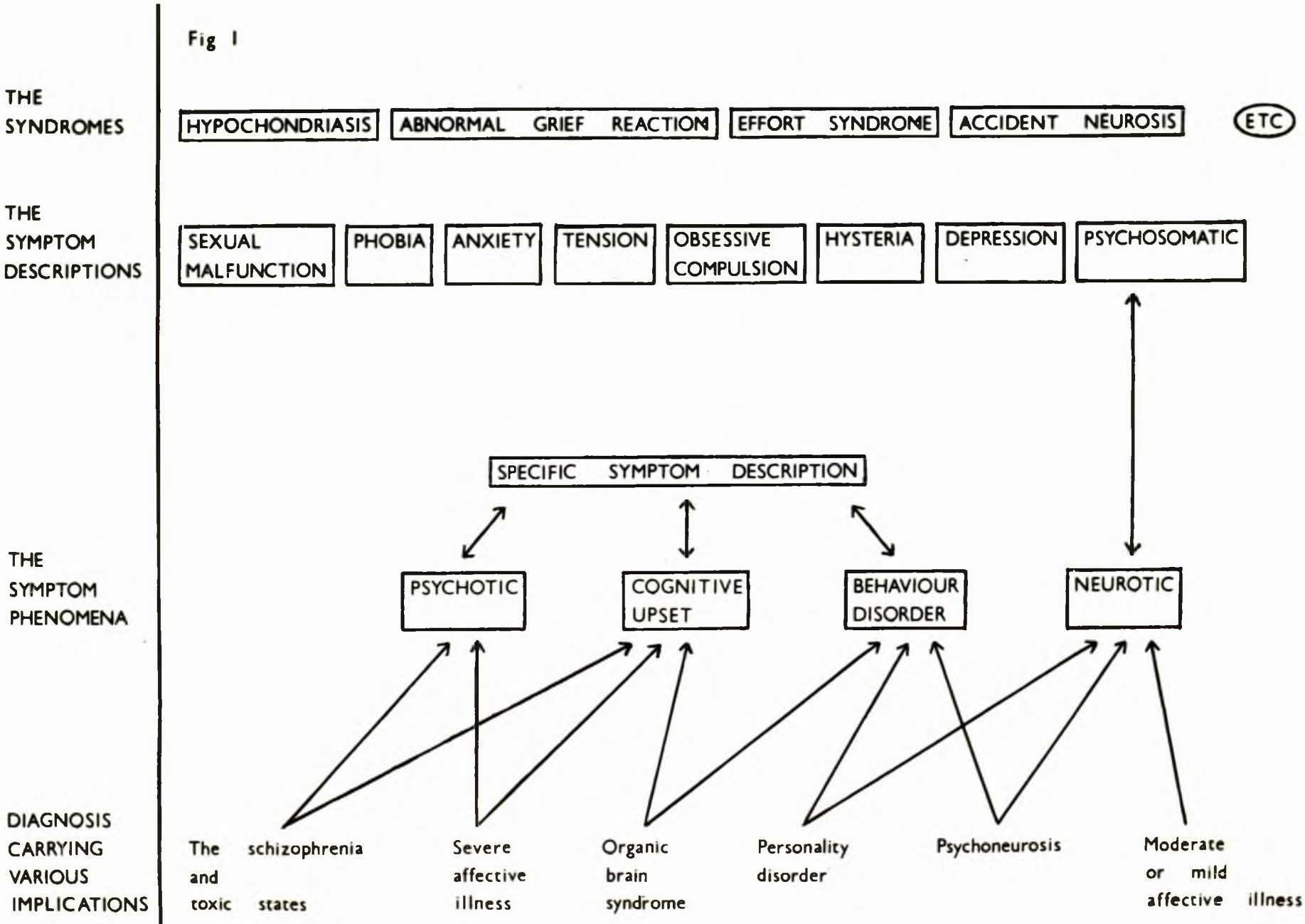
* One case was too demented to answer questions. He was omitted from the statistical tables.

The author's theoretical standpoint is illustrated in Figure 1. At the level of the 'Symptom Phenomena' the assumption is that symptoms can be described in such a way as to allow of grouping into qualitatively differing subdivisions. Symptoms referable to cognitive upset and descriptive of behaviour disorder would cause little disagreement amongst psychiatrists. The subdivision into neurotic and psychotic, although a common clinical practise, is more easily challenged. Here the author has adopted Schneider's view (1959), that neurotic symptoms represent a quantitative extension of the events of every day mental life, whereas psychotic symptoms represent a qualitative change in these same events. This seems to the author, sufficient justification for excluding patients with 'psychotic' symptoms when he aimed to isolate a group as homogeneous as possible in terms of aetiology and prognosis. Referring to Figure 1 again, such a group, once isolated, could be given a 'diagnosis'.

In practise it was decided to exclude patients showing 'psychotic' symptoms if the symptom in question related to any of the descriptions of thought disorder reviewed by Fish (1962). No case in the series presented doubtful or borderline symptoms. See Appendix 3 for list of symptoms encountered.

Another controversial point in the theoretical framework in Figure 1 is the connection of 'psychoneurosis' with 'Neurotic' symptom phenomena, while 'severe affective illness' is associated theoretically with 'psychotic' symptom phenomena. In this

Fig 1


THE SYNDROMES
HYPOCHONDRIASIS
ABNORMAL GRIEF REACTION
EFFORT SYNDROME
ACCIDENT NEUROSIS
ETC
THE SYMPTOM DESCRIPTIONS
SEXUAL MALFUNCTION
PHOBIA
ANXIETY
TENSION
OBSESSIVE COMPULSION
HYSTERIA
DEPRESSION
PSYCHOSOMATIC
SPECIFIC SYMPTOM DESCRIPTION
THE SYMPTOM PHENOMENA
PSYCHOTIC
COGNITIVE UPSET
BEHAVIOUR DISORDER
NEUROTIC
DIAGNOSIS CARRYING VARIOUS IMPLICATIONS
The schizophrenia and toxic states
Severe affective illness
Organic brain syndrome
Personality disorder
Psychoneurosis
Moderate or mild affective illness

respect this investigation was only concerned with whether moderate or mild affective illness in old age was clinically unrelated to the remainder of neurotic illness because if significant differences existed, then these groups would have to be treated separately.

PHASE I

Materials and Methods.

Six possible sources of neurotic people aged 60 and over were sampled. These were:-

1. A Psychiatric Geriatric Out-patient's Clinic (P.O.P. Sample) (N = 6)
2. A Medical Geriatric Out-patient's Clinic (M.O.P. Sample) (N = 2).
3. A General Geriatric Population: A Random Sample was taken from a General Practitioner's list of patients 60 and over. (N = 21). (Random Sample 1: R.S.1).
4. A geriatric population attending a General Practitioner's surgery with complaints diagnosed by that practitioner as 'nervous'. (Surgery Sample 1: S.S.1) (N = 20).
5. A London County Council Home for Aged Ladies. (Home Sample: H.S.) (N = 20).
6. A Female Geriatric Admission ward of a General Psychiatric Hospital. (Admission Sample : A.S.) (N - 0).

Cases for study were extracted from these sources as below:

A. The Psychiatric Out-patient Sample was obtained by studying the presenting symptoms of every new case, and every 'old' case re-presenting at the Geriatric Psychiatric Out-Patient's Clinic of the Maudsley Hospital. These symptoms were discussed with the Consultant in charge of the Unit, and if they met the criteria for 'neurotic', the case was admitted to the series.

A period of four months was covered, 15 clinics in all.

A personal letter was sent to the suitable cases making an appointment to be seen at the Maudsley Out-Patient Clinic. The Author interviewed the patient and his relative at this appointment. (N = 6).

B. The Medical Out-patient Sample was obtained by studying the presenting symptoms, investigative results, and consultant's diagnosis of every new case presenting at the Medical Geriatric Out-patient's Clinic of St. Francis Hospital. Those cases judged suitable by the Author were included in the series.

A period of four months was covered, 30 clinics in all.

A stylotyped letter was sent to the suitable cases making an appointment to be seen at their homes. The Author interviewed the patient and his nearest relative, making another journey to the house if necessary, to collect the required information. (N = 2).

C. The Random Sample 1 was obtained from the lists of the general practice of Dr. John Fry of Bechenham. Dr. Fry had previously indexed his patients by their year of birth. This gave his patients over the age of 60, in batches of 5 year intervals, and in alphabetical order.

From a total of 1200 such patients, 100 were listed and numbered by extracting every 12th case from Dr. Fry's list. A 'pseudo@random' sample of 33 cases was then extracted from these 100 cases with the aid of the randomised numbers in Table 8 of the Cambridge Statistical Tables.

The 33 cases therefore represented 2.7% of the total

over-60 population of the practice.

A stylotyped letter was sent to those 33 persons making an appointment to be seen at their home. The Author interviewed the patient and his nearest relatives, making other journeys to the house if necessary, to collect the required information. (N = 21).

D. The Surgery Sample was obtained from the 'Day Book' kept by Dr. John Fry. In the book he lists, for every surgery, each patient he sees, his age, and his system diagnosis. A system diagnosis of 'nervous' was intended roughly to include all complaints deemed psychiatric in nature or origin.

A period of two months was covered, in which time 475 people, aged 60 and over were seen at the surgery.

Thirty-two individuals from these 475 interviews received a system diagnosis of 'nervous'.

A stylotyped letter was sent to these 32 people making an appointment to be seen at their homes. The Author interviewed the patient and his nearest relative, making other journeys to the house, if necessary, to collect the required information. (N = 20).

E. The Home Sample was obtained from the lists of the residents of the 'Red House', Beckenham. This is a London County Council Home for Aged Ladies (60 and above) at which Dr. John Fry is the visiting General Practitioner.

From the list of 34 residents, 20 names were selected at random, with the aid of Table 8 of the Cambridge Statistical

Tables.

These 20 residents were interviewed by the Author in the Home. (N = 20).

Additional information about the residents was obtained from the Assistant Matron independently.

F. The Admission Sample refers to a study made of the case notes of an Acute Geriatric Admission Ward of Tooting Bec Mental Hospital. There were 21 female patients in the Ward, and no case presented neurotic symptoms, so no further procedure was necessary in this sphere of the investigation.

INTERVIEW PROCEDURE IN PHASE I.

The Author would introduce himself, and explain that he was concerned with investigating some of the problems besetting people aged 60 and over. He would cite failing memory as an example.

For each person there was a booklet in which to record information obtained (see Appendix 3).

The Social details on Page 1 were obtained first, then Previous Psychiatric History. This led to the subject's current symptoms, both those given spontaneously, and those elicited by the Author. If the nearest relative was present, his history re the patient was collected at this point.

Saying, "I'm going to ask you some questions about the sort of person you are", the Author then read the questions of the Maudsley Personality Inventory, singly, explaining a question if necessary, and recording the answers himself.

The subject was then given the Synonyms of the Mill Hill Vocabulary Scale, Form 1 Senior, which he performed unaided if possible. If he was blind or could not read, the Synonyms were read to him, and his answers recorded.

Finally it was explained that "a pure test of memory" was required. The principles of the Inglis P.A.L.T. were explained as per the test instructions. (Inglis, Institute of Psychiatry, Maudsley Hospital, London. JI/1554/DAS).

While suspicion was common at the start of the interview - one old lady refused to allow the Author over the doorstep, and two people sought reassurance that he was not trying to sell

anything, - only one subject would not agree to completing the tests, (Surgery Sample, G.B.M. 64). One patient was too demented to understand simple commands so he was untestable, (Random Sample, R.P.M. 88). One subject was common to the Random Sample and to the Home Sample, (M.S.F. 92).

THE IDENTIFICATION OF A "NEUROTIC" GROUP.

The Maudsley Personality Inventory was given to a group of 58 hysterics (Manual of M.P.I. 1959), not unfortunately in the geriatric age groups. They produced a mean score on the neuroticism scale of 30.82, with a standard deviation of 11.84. This made 18.92 the cut off point at one standard deviation below the mean, indicating that a score of 19 would be a reasonable operational criterion: scores above 19 deciding that the patient would fall into the "neuroticism" group. This criterion was adopted in this study.

It becomes necessary to attempt to validate this operational definition by showing that the group thus delineated presents more troubles of mental life than the "neuroticism-free" group. It should be emphasized that, although, the word 'neuroticism' is used, no dynamic aetiological theory is implied. It was felt that testing any such hypotheses would require intensive and prolonged interviews of a small number of patients. This study was concerned with exploratory description and measurement of the problem in breadth rather than depth.

THE MEASUREMENT OF INTELLECTUAL IMPAIRMENT.

The Inglis Paired Associate Learning Test was given to each subject, on the grounds that anyone with organic brain damage would give distorted responses to the M.P.I. This is based on two assumptions. Firstly, that organic brain damage distorts a patient's critical faculties. Secondly that the 'picture of the patient's personality as seen by himself'

(Manual of M.P.I. London 1959) will be distorted concurrently with his critical faculties. Hence the M.P.I. results would be invalidated in a subject scoring over 30 on the Inglis P.A.L.T. (Inglis 1959). Over 30 being the score which contained no non-brain damaged subjects. The position is slightly complicated by the fact that the Inglis P.A.L.T. in someone of low I.Q. is of suspect validity as being caused by brain damage. Accordingly in this study the synonyms of the Mill Hill were used to test the patient's I.Q. while the Inglis P.A.L.T. was used as a test of brain damage.

Summary:

The materials and methods have been listed above and the Author's reasons for selecting these items have been given. Table 4 shows the way these investigative procedures were deployed throughout the groups.

TABLE 4. INVESTIGATIVE PROCEDURE DEPLOYMENT IN PHASE I

	R.S.I.	S.S.I	H.S.	M.O.P.	P.O.P.	TOTAL
M.P.I.	20	20	20	2	6	68
Inglis P.A.L.T.	20	20	20	2	6	68
Mill Hill Synonyms	20	20	20	2	6	68
Social Information	20	20	20	2	6	68
Symptom Presentation	20	20	20	2	6	68
History of Psychiatric symptoms.	20	20	20	2	6	68
Group Total	21*	20	20	2	6	

* One patient was too demented to answer questions. He was omitted from the statistical tables.

It is readily seen that with one exception all patients provided data in all spheres. The social data collected at this stage was regarded as exploratory and was used in Phase II to provide ideas from which the 'social effects battery' was compiled.

An early review of the literature had suggested several hypothesis which would be testable using the present means of approach. In addition, hypotheses arose as the data was examined. These were as follows:-

Relating to the nature of the material:

A. The Inglis scores will vary with the Neuroticism scores.

B. The variance of Neuroticism will not be similar in the groups.

C. The Surgery sample will contain more Neuroticism than the other two groups and more than each of them.

D. This last difference is not a function of age.

E. That Inglis scores will vary with I.Q. levels.

Relating to the validation of 'neuroticism':

F. That 'neuroticism' correlates with the presence of one, or a combination of :

Presence of neurotic symptoms.

Past history of neurotic symptoms.

History of 'psychosomatic' disorders (see appendix 1).

G. A high Inglis score does not correlate with the presence of neurotic symptoms either currently or in the past.

Relating to the social factors:

H. Living with a spouse tends to prevent the occurrence of neurotic symptoms.

THE STATISTICAL METHOD OF TREATMENT

The P.O.P. Sample and the M.O.P. Sample were discarded as too small and the statistics were then handles as follows:-

1. An analysis of covariance of neuroticism scores with Inglis scores.
2. An analysis of variance of neuroticism scores.
3. An analysis of variance of neuroticism between the Surgery Sample and the other two samples.
4. An analysis of variance of neuroticism between the Random Sample and the Home Sample.
5. An Analysis of variance of age.
6. An analysis of variance of age between the Home Sample and the other two samples.
7. An analysis of variance of age between the Random Sample and the Surgery Sample.
8. A Chi square testing the correlation of Neuroticism scores either currently or in the previous history.
9. A Chi square testing the correlation of Neuroticism scores of over 19 with the presence of neurotic symptoms either currently or in the previous history, and including 'psychosomatic disorders'.
10. A Chi square testing an Inglis Score of over 30 with the occurrence of symptoms either currently or in the past history.
11. A Chi square testing the correlation of the fact of living with a spouse, in the Random sample versus the Surgery sample.

RESULTS.

Table 5 gives a general comparison of the sample characteristics. The female to male ratio is as expected for the Random Sample, but in the Surgery Sample females outnumber males by two to one.

TABLE 5. GENERAL COMPARISON OF THE SAMPLE CHARACTERISTICS - PHASE I.

	R.S.1	S.S.1	H.S.	M.O.P.S.	P.O.P.S.
Total No. of cases interviewed	21*	20	20	2	6
Female to male ratio	11:10	2:1	20:0	2:0	5:1
Average age	67.85	67.9	81.6	77.5	68.1
Total presenting neurotic symptoms	5	17	10	1	5
Average 'Neuroticism' Score on M.P.I.	18.5	26.05	19.8	34.5	28.5
Average Inglis Score	13.05	8.35	40.3	7.0	9.67
% living alone	20	40	--	00	66.6
% living with spouse	70	35	--	50	16.6
% living with other relative	10	25	--	50	16.6
% with 'psychosomatic' disorder	25	5	10	00	00

*One case was too demented to answer questions. He was omitted from the statistical tables.

There is no age difference between the Random Sample and the Surgery Sample and the Medical Out-patient Sample and the Home Sample are considerably older on average. It will be seen that

the average 'neuroticism' score is lowest in the Random Sample and the Home Sample, that is, the samples with no direct contact with a doctor inherent in their selection. The Home Sample presents a high average Inglis Score but patients would be admitted because the social effects of brain damage necessitated this. The figures then are self explanatory until those relating to 'psychosomatic' disorder. An operational definition of this group is given in Appendix 1, but it is relevant here to point out that the difference between the percentage presentation of psychosomatic disorder in the Random Sample 1 and the Surgery Sample 1 is due to the fact that patients attending the surgery would tend to get another 'system diagnosis' rather than that of 'nervous' which was the criterion of selection of the Surgery Sample.

TABLE 6. Additional Information regarding Phase I.

Total numbers of cases from which subjects were taken:	
Surgery Sample	475
Random Sample	1200
Home Sample	34
M.O.P. Sample	51
P.O.P. Sample	47
Rates of presentation of 'neuroticism'	
Surgery Sample	15 out of 20 cases
Random Sample	10 out of 20 cases
Home Sample	12 out of 20 cases
M.O.P. Sample	2 out of 2 cases
P.O.P. Sample	4 out of 6 cases
Failure rate in contacting subjects	
Surgery Sample	37.5%
Random Sample	40%

Table 6 gives additional information regarding the groups used. The figure of 475 cases at risk in the Surgery Sample refers to those 475 people, aged 60 and over seen at the G.P's. surgery over a two month period. It will also be noted that the failure rates are high, 37.5% and 40%. This may reflect the difficulties encountered in sampling a geriatric population. Parsons (1962) found that he was getting such a high failure rate in reply to a personal letter seeking an appointment, that he used "the surprise personal approach" from half way through his study.

In addition he calculated that 10% of his sample died in the interval between making the sample and interviewing, and ½% of the sample moved house per month.

Tables 7, 8 and 9 give the raw data for the calculations which follow. They can be found in Appendix 8. Table 7 represents the raw data relating to 'neuroticism' scores on M.P.I. Table 8 presents the age distribution in the groups and table 9 presents the raw data relating to Inglis P.A.L.T. scores. From this data the statistical treatment follows as enumerated below.

Table 10 summarises the analysis of covariance of 'neuroticism' scores and Inglis Paired Associate Learning test scores. An expanded version of this table is given in Appendix 8 Table 10. The analysis shows that"neuroticism"scores are independent of Inglis P.A.L.T. scores.

TABLE 10: Summary of Analysis of Covariance.

Analysis of covariance of regression of N on I.

Source	d.f.	m.s.v.	F.
Accounted for	I	22.35	22.35/105.6
Residual A	56	105.6	i.e.F. < 1.0
Total	57		

Analysis of covariance of N and I.

Source	d.f.	m.s.v.	F.
Residual B	54	108.56	25.30/108.56
Residual A-B	2	25.30	i.e.F. < 1.0
Total	56		

The two variance ratios are not significant, thus showing that 'Neuroticism' scores do not vary with Inglis scores

The groups differed significantly in 'neuroticism' scores and in the ages of the subjects.

Table 11 shows the analysis of variance of 'neuroticism' and age. There was a significant difference in the neuroticism scores as between groups.

TABLE 11. Analysis of Variance of 'Neuroticism' and age.

		Neuroticism	
Source	d.f.	m.s.v.	F
Groups	2	325.85	3.12*
Residual	57	104.44	
Total	59		

		Age	
Source	d.f.	m.s.v.	F
Groups	2	1255.85	22.73**
Residual	57	55.25	
Total	59		

*Significant at the 5% level
**Significant at the 1% level

Similarly there was a significant difference in ages as between groups. Table 12 shows the analysis of variance of 'neuroticism' between the surgery sample and the other two groups. 'Neuroticism' is shown to be significantly higher in the Surgery Sample.

TABLE 12: Analysis of variance of 'neuroticism' between the surgery sample and the other two groups.

Source	Sam. Sq.	d.f.	Mean sq. variance
Total observed variance	6604.85	60-1	634.8
Variance between groups	634.8	1	93
Residual variance within groups	5970.05	60-2	102

$F = 6.17$

$0.05 < P < 0.01$

The surgery sample was significantly different in 'neuroticism' from the other two groups.

Table 13 shows the analysis of variance of 'neuroticism' between the Random Sample and the Home Sample. 'Neuroticism' variance is shown to be insignificant between these two groups.

TABLE 13: Analysis of variance of 'neuroticism' between the Random Sample and the Home Sample.

Source	Sum.sq.	d.f.	Mean sq. variance
Total observed variance	4401.1	40-1	
Variance between groups	16.9	1	16.9
Residual variance within groups	4384.2	38	115.37

F = 0.15, not significant.

There was no difference in 'neuroticism' between the Random Sample and the Home Sample.

Remembering that there was a significant difference in age as between groups (Table 11), table 14 shows the analysis of variance of age between the Home Sample and the other two Samples.

TABLE 14: Analysis of variance of age between the Home Sample and the other two samples

Source	Sam.sq.	d.f.	Mean sq. variance
Total observed variance	5660.85	60-1	
Variance between groups	2511.68	1	2511.68
Residual variance within Groups	3149.17	58	46.26

$F = 46.26$
$P < .0001$

There was a highly significant difference in the ages of the subjects in the Home Sample as compared with the other two samples taken together.

It is shown that the ages of the patients in the Home Sample are significantly higher than in the other two samples. For the sake of completeness, table 15 shows that there is no variance of age as between the Random Sample and the Surgery Sample.

TABLE 15. Analysis of variance of age between the Random Sample and the Surgery Sample.

Source	Sam.sq.	d.f.	Mean Sq.variance
Total observed variance	1824.37		
Variance between groups	.02	1	.02
Residual variance within groups	1724.35	38	48.01

F = .0004 - not significant

There was no significant difference in the ages of the people in the Random Sample and the Surgery Sample.

Superficial examination of the data suggested only one possible significant factor in the social data collected in Phase I. This was the fact of living with a spouse as opposed to living alone or with some other relative.

Table 16 gives a Chi square test applied to this data, showing that people in the Random Sample were significantly more likely to be living with a spouse than those in the Surgery Sample.

Table 16: Correlation of the fact of living with a spouse in the Random Sample as opposed to the Surgery Sample.

Random Sample		Surgery Sample		Chi^2	P
With Spouse	Total	With Spouse	Total		
14	20	7	20	4.912	.05

Subjects in the Random Sample were significantly more likely to be living with a spouse than those in the Surgery Sample.

Table 17 and 18 show that there was no correlation between having a 'neuroticism' score (i.e. over 19) and having neurotic symptoms at the time of examination and/or having had neurotic symptoms in the past.

TABLE 17: Correlation of a 'Neuroticism' Score in the M.P.I. with the occurrence of neurotic symptoms at the time of interview.

'Neuroticism' Score		'Non-neuroticism' Score		Chi^2	P
Symptoms current	Total	Symptoms current	Total		
22	37	7	23	4.78	0.05

A score of over 19 in the 'neuroticism' scale of the M.P.I. correlated significantly with the occurrence of neurotic symptoms at the time of interview.

TABLE 18: Correlation of a 'neuroticism' score on the M.P.I. with the presence of a history of neurotic symptoms and/or current neurotic symptoms

'Neuroticism' Score		'Non-Neuroticism' Score		Chi^2	P
Positive History or current symptoms	Total	Positive History or current symptoms	Total		
26	37	13	23	1.17	Not significant

There was no correlation between a 'neuroticism' score of over 19 on the M.P.I. and the presence of a history of neurotic symptoms and/or current neurotic symptoms.

TABLE 19: Correlation of a 'neuroticism' score with that group of subjects who have current neurotic symptoms, or who have had neurotic symptoms in the past, or who were suffering from a psychosomatic disease (See Appendix 1).

'Neuroticism' Score		'Non-Neuroticism' Score		Chi^2	P
Neurotic and/or Psychosomatic Disease	Total	Neurotic and/or Psychosomatic Disease	Total		
30	37	13	23	5.49	0.05

That group of subjects who had current or past neurotic symptoms and/or psychosomatic disease was significantly more likely than not to have a 'neuroticism' score of over 19 on the M.P.I.

On the other hand there is a significant correlation between a 'neuroticism' score and the current presentation of neurotic symptoms. If one groups together all the patients who have had neurotic symptoms in the past, or present currently with neurotic symptoms, or give a history of psychosomatic disorder (Appendix 1), one finds that there is a significant correlation as shown in Table 19.

It might be argued that what produces a brain damaged score is identical with what causes the production of neurotic symptoms. This is tested in Table 20 which shown no correlation between a brain damaged score on the Inglis P.A.L.T. and the occurrence of neurotic symptoms either currently or in the past history.

TABLE 20: Correlation of an Inglis score of over 30 with the occurrence of neurotic symptoms either currently or in the past history.

Brain damaged Group		Non-brain damaged Group		Chi^2	P
With neurotic symptoms	Total	Without neurotic symptoms	Total		
6	13	33	47	2.59	Not significant

There was no connection between a brain damaged score on the Inglis P.A.L.T. and the occurrence of neurotic symptoms either currently or in the past.

The significance of these findings in relation to the hypotheses already formulated is discussed in the next section of the work.

DISCUSSION OF THE FINDINGS

From Table 5 it is obvious that the M.O.P. Sample and the P.O.P. Sample are too small to be used in the statistical handling of the results. This leaves three groups, each of 20 cases which are sufficient to supply the information needed about the nature of the material. It will also be seen that analysis on a sex specific basis is not feasible because the Home Sample was drawn from an exclusively female population.

Hypothesis A arose from assumptions found in the literature. That is, that behavioural anomalies which in younger persons would be termed neurotic, are in older people attributed to brain damage. (See Appendix 3 for list of symptoms discovered). It was expected that the people with neurotic symptoms would have to be subdivided into those with cognitive defect and those without. Table 10 however, shows no significant covariance of 'neuroticism' scores with Inglis scores. The surprising conclusion is that, if brain damage influences the Inglis score, then brain damage has no influence on the production of a high 'neuroticism' score.

Hypothesis B postulates that the groups will vary in the amount of 'neuroticism' which they show. On a priori grounds it would seem unlikely that such qualitatively different groups would contain equal numbers of neurotic people. Hypothesis B is treated in Table 11. This proves that there is a probability greater than .01 and less than .05 that the variance in the 'neuroticism' scores in the groups could be accounted for by chance. That is, there is a significant difference

in the 'neuroticism' scores as between groups. It was hypothesized that the Surgery Group would contain the highest amount of 'neuroticism' - Hypothesis C.

This hypothesis could not be tested till it was proven that one did not need to treat the neurotics group as those with, and those without, brain damage. They can now be treated with no regard to Inglis score, and Table 12 shows that there is a probability greater than .01 and less than .05 that the difference between the Surgery group and the other two groups occurred by chance. That is, that the Surgery Sample is significantly higher in 'neuroticism' scores than the other two groups (see table 5). This statement is meaningless until it is shown that the other two groups do not vary significantly between themselves in 'neuroticism', since a high and low score could have cancelled each other out. This is done in Table 13 where no significant difference in neuroticism is found between the two groups.

The question arises, does this difference in 'neuroticism' merely reflect a difference in age distribution in the groups? An analysis of variance of age was therefore undertaken. Table 11 shows that age varies significantly between the groups. Table 14 shows that the age distribution in the Home Sample is very significantly different from that in the other two groups. That it is higher can be deduced from Table 5. As before we have to show that those other two samples do not differ significantly, and this is done in Table 15.

Thus we have shown that the Surgery Sample is significantly

higher in 'neuroticism' than the Random Sample, but there is no difference in age. The Home Sample is significantly older than the Random Sample but is not significantly different in 'neuroticism' from the Random Sample. It follows that age differences do not account for the differences in 'neuroticism' scores, which accords with Hypothesis D.

Hypothesis E, that Inglis scores will vary with I.Q. levels, was made redundant when it was shown that Inglis scores did not vary with 'neuroticism' scores, and it was therefore not tested.

It has been shown that 'neuroticism' scores do not vary with Inglis scores. It remains to be shown that 'neuroticism' scores have some clinical relevance.

The clinical correlations of 'neuroticism' scores are tested in Table 17 and Table 18 and 19. Table 17 shows that a 'neuroticism' score - over 19 on the M.P.I. - correlates with the presentation of neurotic symptoms at the time of interview, whereas no correlation is found between a 'neuroticism' score and that group who give a history of neurotic symptoms in the past or who currently present neurotic symptoms (Table 18). That is, there is no correlation between a high M.P.I. and a longitudinal perspective of neurotic illness. However it was found (Table 19) that a high 'neuroticism' score did correlate significantly with that group of patients who had current neurotic symptoms, or who had had neurotic symptoms in the past, or who were suffering from apsychosomatic disease. That is, hypothesis F is proven.

Again, it is possible that high Inglis scores would correlate with the presence of symptoms either currently or in the past as stated in hypothesis G. This correlation was done and found not significant - Table 20.

The effect of inclusion of psychosomatic disorders on the results emphasises the somatization of symptoms said to be common in elderly people. This suggests that a group of high 'neuroticism' is being missed in the G.P.'s surgery when he classifies their condition as, for example, 'alimentary', rather than 'nervous'. This would account for the discrepancy already noted in the percentages with psychosomatic disorder between the Surgery Sample and the Random Sample - Table 5.

In Table 16 a final correlation was done, which showed that people in the Random Sample were significantly more likely to be living with a spouse than people in the Surgery Sample, i.e. people who attended a G.P.'s surgery with a complaint which was classified as 'nervous'. This would indicate that social factors can have a buffeting effect on the illness.

The question of the most fruitful source of 'neuroticism' in the population can now be examined.

From Table 6 it will be seen that the Surgery Sample produced the highest percentage of 'neuroticism' cases from those examined. It could be argued that neurotic patients had refused to be interviewed. We know, however, that the Surgery Sample is more neurotic than the Random Sample, yet Table 6 shows that the failure rate in the Random Sample is greater than

that in the Surgery Sample, so we may conclude that 'neuroticism' does not drive people to refuse to be interviewed by a doctor.

In the case of the Surgery Sample the initial screening into a 'nervous' group had been done by the general practitioner. The results indicate that this screening did not pass many 'non-neurotics' as 'nervous'. Provided a G.P. is willing to note the names of those people attending with 'nervous' complaints, the surgery would appear to be the most fruitful source of 'neurotic' geriatric patients.

The high prevalence of 'neuroticism' in the Random Sample (50%) is surprising and needs to be checked in a larger population. If this percentage is found to hold, then a vast field of minor neurotic manifestations opens up, since the M.P.I. questionnaire is essentially a list of symptoms and signs of distress. Furthermore these symptoms are potentially treatable since they are not produced by the brain damage of senility as has been shown.

A comparison of the average 'neuroticism' scores in Table 5 indicates that 'neuroticism' is not a factor in forcing people out of their homes and into institutional care. In this connection it will be remembered that no cases presenting with neurotic symptoms were found in the geriatric Admission Ward of a General Psychiatric Hospital. (See chapter on Method).

In view of the lack of correlation between a 'neurotic' score and the occurrence of neurotic symptoms currently and/or in the past, the validity of the M.P.I. in this age group comes into question. It might be safer to regard it as a measure of current

neurotic distress than as a measure of a neurotic diathesis.

Phase II of this work was designed to include as many as possible of the questions raised in this discussion.

SUMMARY OF PHASE I

Phase I was designed to detect neurosis in the over 60 age group and to find the most fruitful source of this condition. A number of geriatric populations were sampled and subjects were required to complete questionnaires chosen as methods of measuring neurosis and other variables such as brain damage, which might contaminate the results. Old people living in their own homes, and old people attending their doctor's surgery with 'nervous' complaints, were found to be heavily loaded with the measure of 'neuroticism' used. This measure was shown to have some clinical validity and to be unrelated to either the degree of brain damage, or the age of the subject. There was some indication that social factors might play an important part in the neurosis of old age - either as cause or effect.

PHASE II

INTRODUCTION

Phase II was planned essentially as a clinical study of elderly people suffering from psychoneurosis.

It aimed firstly to demonstrate how such a group differed from old people free of mental illness of any kind.

Secondly it compared a series of neurotic old people who had required hospital admission, with a series surviving in their own homes.

Thirdly it compared these cases with affective symptoms with those with all other symptom presentations.

Fourthly, an exploratory investigation of the social correlates of neurotic illness was undertaken.

Lastly, while collecting the material for the above studies, a validation study of the Maudsley Personality Inventory Neuroticism Scale was undertaken. The information gained by these investigations allowed fairly confident generalizations about the clinical aspects of "geriatric" psychoneurosis to be made.

It will be seen therefore that Phase II falls naturally into six divisions which can be headed thus:-

1) "Neurotics" compared with "controls".
2) "Neurotic in-patients" compared with "Domestic neurotics".
3) "Affective neurotics" compared with "other neurotics"
4) Social correlates of neurosis
5) Validation of measurements of "neuroticism".
6) Composite clinical picture of neurosis in old age.

MATERIALS AND METHODS.

The data for Phase II was collected as follows. Those cases interviewed in Phase I in Surgery Sample I and Random Sample I were circularised asking for a second interview to collect more information. Table 21 shows that 28 of these 40 cases were reinterviewed. Once again a high failure rate is noticed. This accords with Parson's (1962) experience already noted, when he studied a sample of old people in Swansea and had to contend with a high death rate and a high mobility rate. He found that the natural suspiciousness of old people was so great that half way through his study he switched from using a letter requesting an appointment, to the "surprise personal approach", in which he presented himself unannounced on the subject's doorstep.

TABLE 21 Investigative procedure deployment Phase II

	R.S.2	R.S.3	S.S.2	N.I.P.	TOTAL
Psychiatric Case Histories	15	33	13	--	61
Mental State	15	33	13	--	61
Cornell Medical Index	15	33	13	--	61
Cognitive Assessment Test	15	33	13	--	61
Social correlates tables	15	33	13	--	61
Historical data extracted out of punch cards	15	33	13	73	134
Total at risk	20	67	20	73	

Since it had been demonstrated in Phase I that refusal to be interviewed was not related to "neuroticism", and since the study was not concerned with prevalence rates, no special efforts were made to persuade people to be reinterviewed if they did not express their willingness on the first approach. Thus the groups, Surgery Sample 2, and Random Sample 2, were formed.

In addition, the remaining 67 cases of the original 100 taken from the G.Ps. list by random sample, were circularised requesting an interview. This produced a further 33 cases interviewed. Thus the group Random Sample 3 was formed. A second Random Sample was chosen in preference to a second Surgery Sample in order to obtain a group of control case histories.

The raw data pertaining to Random Sample 2, Random Sample 3, and Surgery Sample 2, is found in Appendices 12, 13, and 14 respectively.

Finally, the primary diagnoses of all patients over 60 who were admitted to the Bethlem Royal Hospital and the Maudsley Hospital over the 5 year period 1958 - 1962 were sorted on Hollerith cards. Those cases with a primary diagnosis of one of the psychoneuroses in the International Classification of Diseases, were extracted. The case notes of these 88 cases were then examined. Fifteen cases had had the diagnosis changed in the light of follow up information,

so these were discarded. Thus, 73 case histories comprised the Neurotic In-patient Sample. These 73 should not be taken as a hospital prevalence or incidence rate because the Joint Hospitals referral system is not representative, and for one of the years in question, 1960, the geriatric ward was closed for repairs. Therefore, fewer cases were admitted than would normally have been the case. Further,9 of the cases had a secondary diagnosis of organic brain syndrome so in order to forestall possible criticism these were omitted from the group which was used in the search for correlates of neurotic illness, i.e. 64 cases were used in the statistical analysis.

These then were the samples interviewed in Phase II. A description of the data collected now follows.

Table 21 shows that Random Sample 2, Random Sample 3 and Surgery Sample 2 had a complete psychiatric case history and mental state taken. Their cognitive function was screened using a standard series of questions to test for memory impairment, and they were required to answer the questions in the Cornell Medical Index. In addition they were given a "social correlate battery" - a series of questions designed to explore social correlates in the patient's working life, domestic life, and medical life. The booklet used to gather this information in standard form is shown in Appendix 10.

On a priori grounds 85 pieces of information obtainable in a case history or mental state and including the "social correlates battery" had been coded as of possible relevance to the investigation. Appendix 9 shows the complete code. All the case histories obtained in Phase II were examined for these "information bits" and the data was transferred to a punch card system to allow of further analysis. Thus 134 subjects were coded for 85 bits of information.

The case histories of all subjects showing any abnormality, if only slight personality deviance, were summarised and are to be found in Appendix 15. The author added a formulatory sentence to each case and concluded by adding his own diagnosis. This meant that he assigned each case to one of the following groups (see Fig. 1 for theoretical framework):- The Schizophrenia and Toxic States, Severe Affective Illness, Organic Brain Syndrome, Personality Disorder, Psychoneurosis, Moderate or Mild Affective Illness and Psychosomatic disorder. Psychosomatic disease was operationally defined as the groups- asthma, migraine, peptic ulcer, hypertension, thyrotoxicosis, rheumatoid arthritis. Skin conditions were not included because of the difficulty in relating either "neuroticism" or any other psychiatric illness to the diagnostic groups in dermatology (Kenyon 1962). Where the case warranted it, a double diagnosis was given. In

turn, this "Author's diagnosis" was coded and punched onto the subject's card. The extraction of the "information bits" regarding the case history and mental state was performed before the "author's diagnosis" was reached. Because of this order of procedure, and because of the complicated nature of the material, it was hoped that where a subjective opinion was called for, that opinion could be formed virtually "blind" in respect of the other possible correlates.

INTERVIEW PROCEDURE IN PHASE II.

Whan an interview was granted, the subject would be visited in his home. Firstly, he would be given the Cornell Medical Index to complete while the author interviewed his nearest relative in a separate room and obtained a description of the subject's personality and a description of his personal life, e.g. sexual adjustment, smoking and drinking habits, hypochondriacal traits, etc. The completion of the Cornell Medical Index seemed to establish the doctor-patient relationship in the author's absence and he experienced no difficulty in eliciting a psychiatric life history as the next step. The "social correlates" questions then followed naturally and upset no subjects. An assessment of the mental state and the cognitive function screening questions were left until the end of the interview which lasted from one to two hours. In this way no obvious resistance was encountered.

THE IDENTIFICATION OF "NEUROTICISM" IN PHASE II

For the purpose of a cross validation study of previous measures of "neuroticism" given by the "N" score of the Maudsley Personality Inventory, the Cornell Medical Index was given to all patients interviewed in Phase II.

A group of patients, 28 in number, therefore completed both a C.M.I. and an M.P.I. In addition, from Random Sample 3, a control group free of clinical symptoms of neurotic illness was obtained (15 cases).

The Cornell Medical Index is a questionnaire pertaining to all aspects of the subject's health. The questions in the section M - R (see appendix 10) relate to "neuroticism". Culpan, Davies & Oppenheim (1960), in a study using the C.M.I. on six populations, showed that, using a critical score of 10 and above on the M - R section, the misclassification rate was 20% for neurotic men and 24% for neurotic women. Although this standardization was not performed against elderly subjects, in the absence of more relevant data, 10 or more was taken as a "neuroticism" score for the purposes of this study.

THE STATISTICAL METHOD OF TREATMENT.

2 x 2 tables were used to establish correlations by the Chi square method. Where a cell contained a number less than 5, Yates' Correction was applied. In addition, in view of the fact that the total number of cases was under 300, any correlation found to be significant was checked using Yates' correction. Where the expected value in a cell was less than 5, Fisher's Exact Treatment was applied. If the total number of cases was greater than 40 the exact treatment was calculated as per Maxwell (1961). If the total number of cases was less than 40 Finney's tables (1963) were used.

A correlation coefficient was used to test the relationship between M.P.I. scores and C.M.I. scores.

The student's t test was used to test the influence of sex on the C.M.I. scores.

RESULTS

Table 22 gives a general comparison of the sample characteristics of those cases interviewed in Phase II. It will be seen that in all, 61 cases were interviewed. Comparison of the characteristics of Random Sample 2 and

TABLE 22. General Comparison of the Sample Characteristics of those cases interviewed in Phase II.

	R.S.2	R.S.3	S.S.2
Total No. of Cases	15	33	13
Female to male ratio	7:8	16:17	9:4
Average age in years	66.6	67.8	68.5
Total clinically neurotic	11	21	13
Average C.M.I. Score (M-R)	4.8	6.8	13.6

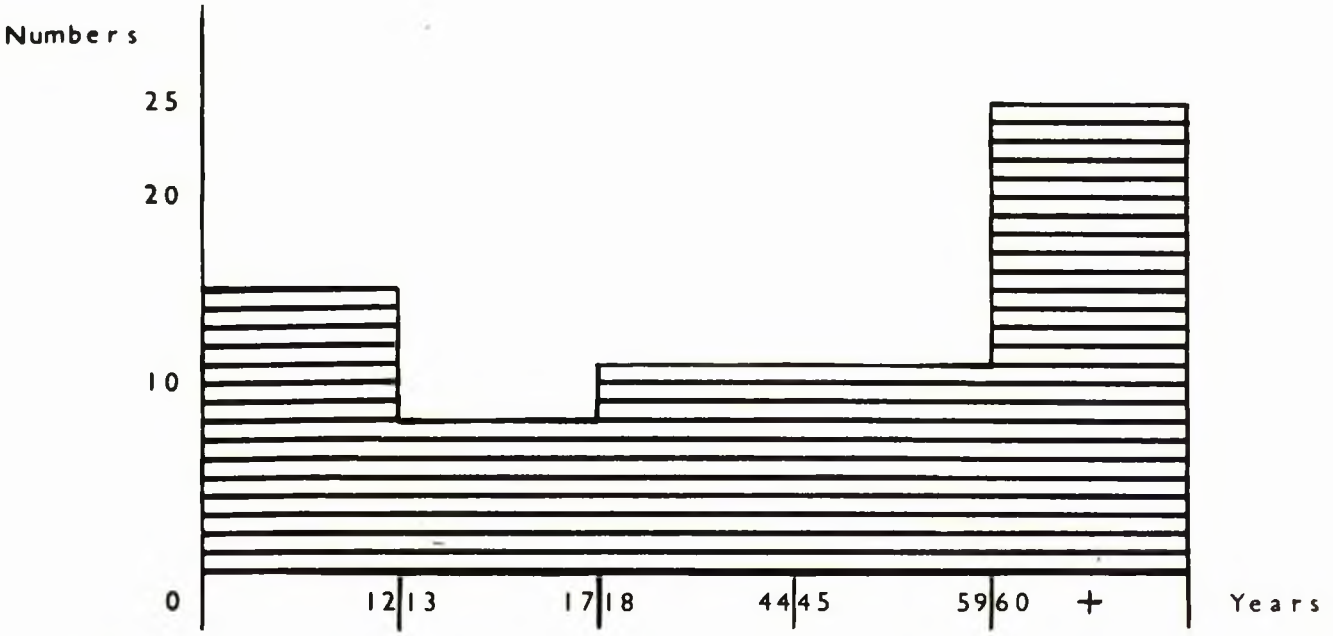
Random Sample 3 shows little difference between these groups, which is as expected since they were selected at random. The Surgery Sample is different in that it has a higher proportion of female subjects and a higher average "neuroticism" score on the C.M.I. These differences are due to the fact that the Surgery Sample is a selected group, in that the general practitioner has already given each patient a system diagnosis of "nervous". (See "Materials and Methods" Phase I). It might be argued that the inclusion of this Surgery Sample could load the total sample in the direction of one particular type of neurosis. However,

in Fig. 2 we have a comparison of the age incidences of neurotic symptoms in the Random Sample and the total sample i.e. Random Sample plus Surgery Sample. It is seen that the addition of the Surgery Sample does not change the overall pattern in any marked degree. It is interesting to note that the age group 60+ carries the highest incidence of neurotic symptoms in the Random Sample.

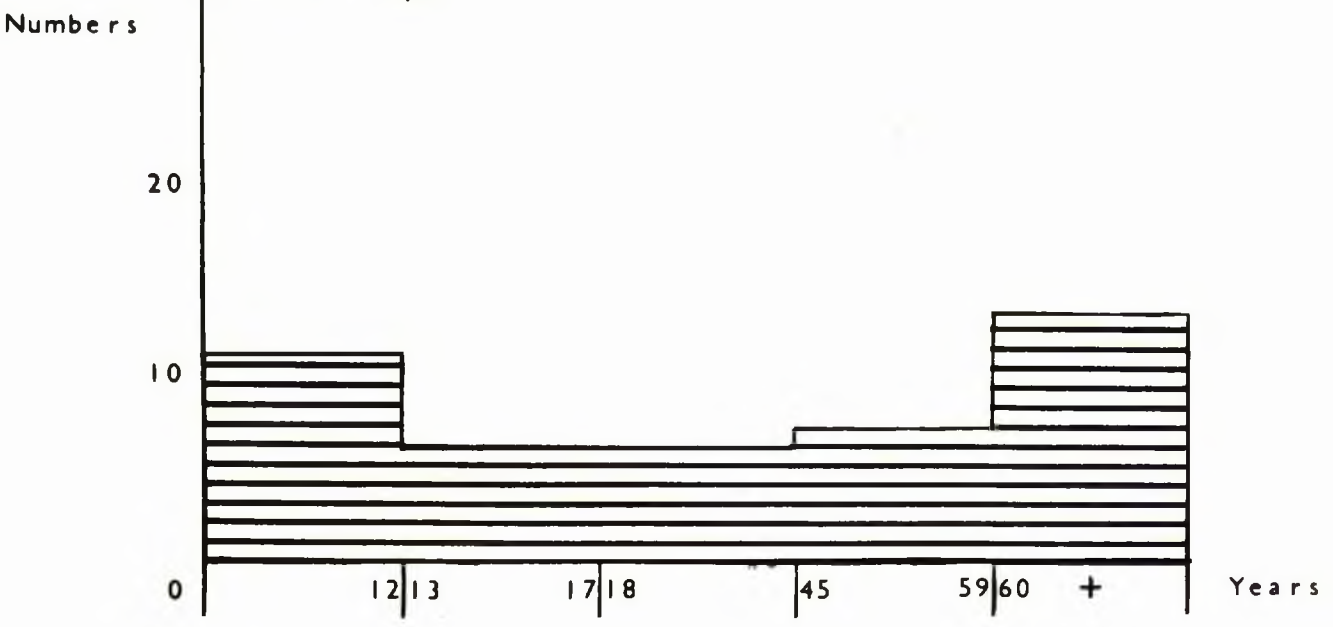
The findings relevant to each of the six divisions already mentioned, will now be given.

Fig 2

A Distribution of those cases presenting neurotic symptoms in the various age groups in the total sample



B Distribution of those cases presenting neurotic symptoms in the various age groups in the random sample



Division 1. "Neurotics" compared with "Controls".

Fifteen subjects of the 33 who comprised Random Sample 3 were found to be free of all suspicion of mental illness, either in the form of symptoms or of personality deviance. This group was used as a control group although it was redognised as small. By using refined statistical techniques it is possible to draw fairly confident conclusions about such small numbers. The remaining subjects were divided into two groups. Those cases showing affective symptoms were separated from the other neurotic cases, thus forming the "Affective Neurotics" and the "Other Neurotics". It was felt that this was necessary to forestall criticism on the widely held theoretical grounds that mild affective illness is qualitatively different from the psychoneuroses.

Division 1, therefore, examines these two groups to see if they differ from the control group.

Table 23 gives a general comparison of the characteristics of the three groups. They do not differ markedly in their average age, but the sex ratio is reversed for the control group as opposed to the other two groups. The control group results from the subtraction of the mentally ill from a random sample in which the male to female ratio

TABLE 23. General comparison of Controls, "Affective Neurotics" and "Other Neurotics".

Comparison	Affective Neurotics		Controls		Other Neurotics	
Total	62		15		67	
Average Age	67.6 yrs.		68.1 yrs.		66 yrs.	
	Number	%	Number	%	Number	%
Male sex	24	38.7	10	66.6	20	42.6
Social Class I & II	11	17.7	3	20.0	11	23.4
III	27	43.5	8	53.3	25	53.2
IV	12	19.4	4	26.6	6	12.8
V	12	19.4	0	0.0	5	10.6

was equal initially. Since the mentally ill group was almost exclusively neurotic and composed mainly of females, the control group is found to have a preponderance of males.

Examination of the distribution by social class shows a preponderance of Social Class III in all groups. However, Social Classes IV and V, have proportionately greater representation in the affective neurotic group than in the other two groups. This difference does not reach significance, but it does agree roughly with the findings of Hollingshead and Redlich (1958), in that the neuroses have greater representation in the upper social classes, and affective

illness greater representation in the lower classes.

The family and medical histories of the "Other Neurotics" group and the "Affective Neurotic" group are compared with those of the control group in Tables 24 and 25 respectively. The only significant difference to emerge was that the "Other Neurotic" group was more likely to give a history of behavioural maladjustment in a parent than was the control group. Looking at the columns it is clear that there is a marked tendency for both the "Other Neurotic" group and the "Affective Neurotic" group to show disturbance in their family histories whereas this is totally absent from the control group. This disturbance does not show statistically when corrections for small groups are made.

TABLE 24: Comparison of "Other Neurotics" and controls in their family and medical histories.

Comparison	Other Neurotics N = 47		Controls N = 15		Chi Sq.	P.	Significance
	Number	%	Number	%			
Positive psychotic history in a parent	0	0	0	0	--	--	--
Positive neurotic history in a parent	1	2.1	0	0	++	0.48	--
Positive history of behavioural maladjustment in a parent	14	29.7	0	0	++	0.024	*
Positive psychotic history in a sibling	4	8.5	0	0	++	0.64	--
Positive neurotic history in a sibling	7	14.9	0	0	++	0.26	--
Positive history of behavioural maladjustment in a sibling	1	2.1	0	0	++	0.48	--
Positive history of chronic illness or disability	16	34.0	3	20.0	++	0.49	--

* Significant at 5% level
** Significant at 1% level

\+ Yates' correction applied
++ Fisher's exact treatment used.

The "Other Neurotics" were significantly more likely than "Controls" to give a history of behavioural maladjustment in a parent.

TABLE 25: Comparison of "Affective Neurotics" and Controls in their family and medical histories.

Comparison	Affective Neurotics N = 62		Controls N = 15		Chi Sq.	P.	Significance
	Number	%	Number	%			
Positive psychotic history in a parent	3	4.8	0	0	++	0.97	--
Positive neurotic history in a parent	8	12.9	0	0	++	0.32	--
Positive history of behavioural maladjustment in a parent	15	24.2	0	0	++	0.053	--
Positive psychotic history in a sibling	4	6.5	0	0	++	0.82	--
Positive neurotic history in a sibling	7	11.3	0	0	++	0.41	--
Positive history of behavioural maladjustment in a sibling	3	4.8	0	0	++	0.97	--
Presence of chronic physical illness or disability	18	29.0	3	20.0	.146+	--	--

*Significant at 5% level
**Significant at 1% level
+Yates' correction applied
++Fisher's exact treatment used

No significant differences were found.

Division 2. "Neurotic In-patients" Compared with "Domestic Neurotics".

In this section the neurotic in-patients are compared as a group with the neurotic subjects found living at home. This was done to find out if any special selection criteria for in-patient treatment operated to make the in-patient neurotics qualitatively or quantitatively different from the neurotic subjects surviving at home. The groups were not treated as groups in an aetiological investigation because it was felt that they were not sufficiently homogeneous to allow one to expect positive results.

Table 26 shows the comparisons made between the In-patient neurotic cases and the neurotic subjects found at home. A glance at the significance column shows that there was no difference in sex or social class distribution in the groups. If one considers that by definition the In-patient group must have been socially incapacitated at least once, then one can discount the only significant difference found in comparing the number of times the subjects were socially incapacitated.

The domestic neurotics had a significantly greater number affected for 6 - 10 years, while the in-patient neurotics had a significantly greater number affected from 3 - 5 years. This reversal effect might be caused by the taking of an arbitrary cut-off point and indeed when one sums the two durations and compares the groups for the duration of symptoms from 3 - 10 years, no significant difference

Comparison	In-patient Neurotics Number	Total	%	Domestic Neurotics Number	Total	%	Chi^2	P.	Significance
Male Sex	26	64	40.6	18	45	45	0.004	-	—
Symptom Duration:									
Under 1 yr.	28	64	43.8	9	27	33.3	0.85	-	—
1 - 2 yrs.	8	64	12.5	6	27	22.2	++	0.14	—
3 - 5 yrs.	16	64	25	1	27	3.8	6.44+	-	*
6 -10 yrs.	5	64	7.8	7	27	25.9	++	0.053	*
11-20 yrs.	3	64	4.7	3	27	11.1	++	0.49	—
Social Class:									
I & II	11	64	17.2	12	45	26.7	1.43	-	—
III	27	64	42.2	24	45	53.3	1.32	-	—
IV	12	64	18.8	6	45	13.3	0.56+	-	—
V	14	64	21.8	3	45	6.7	3.56+	-	—
Author's Diagnosis:									
Personality disorder	27	64	42.1	22	45	47.8	0.47	-	—
Psychoneurosis	14	64	21.8	12	45	26.0	0.34	-	—
Moderate mild affective disorder	46	64	71.9	18	45	39.1	9.80+	-	*
Psychosomatic disorder	3	64	4.9	8	45	17.3	++	0.057	*
Number of times Incapacitated									
1 x	30	64	46.9	12	45	26.7	4.56	-	*
2 x	18	64	28.1	7	45	15.5	2.361	-	—
3 x	6	64	9.4	0	45	0	++	0.074	—
More than 3 x	10	64	15.6	4	45	8.9+	0.55	-	—

*Significant at 5% level
**Significant at 1% level
+Yate's correction applied
++Fisher's exact treatment used.

between the groups is found.

However it does seem that diagnosis plays a part in deciding if an elderly neurotic patient goes into hospital or stays at home. There were significantly more moderate to mild affective disorders in the In-patient group, and significantly more psychosomatic disorders in the domestic cases. It may be that when psychosomatic old people are hospitalized they are not referred by their general practitioners to a psychiatric department. General practitioners may find affective symptoms more of a threat or feel that these are more amenable to specialist treatment.

In general one can say that apart from the higher percentage of mild affective disorders in the In-patient group, this group did not differ dramatically from those neurotic cases living at home.

Division 3. "Affective Neurotics" compared with Other Neurotics"

It was decided to make a comparison between those subjects presenting affective symptoms and the remaining group with mixed neurotic symptoms. Thus, the two groups, "Affective Neurotics" and "Other Neurotics", were formed.

Table 27 shows this comparison in terms of the subject's family history, previous psychiatric history, personality structure and those aspects of the medical history which appeared to warrant investigation after an initial inspection of numbers involved. The "Other Neurotics" group contained significantly more cases presenting neurotic symptoms in childhood and adolescence. This supports the view of neurotic symptom formation being the top of the iceberg, with a life long constitutional weakness existing subclinically. No significant differences were found in the descriptive groupings of personality deviance used in this study. The medical histories revealed no correlates with either group, with the exception of sleep disturbance. Any current sleep disturbance was closely examined and those cases with difficulty in falling asleep or broken sleep, as opposed to the "early waking" phenomenon, were noted. It was found that the Affective Neurotic group carried a very

Psychiatric Case Histories.

Comparison	Affective Neurotics N = 62 Number	%	Other Neurotics N = 47 Number	%	Chi^2	P	Significance
Psychotic history in a parent	3	4.8	0	0	++	0.36	--
Neurotic history in a parent	8	12.9	1	2.1	++	0.082	--
Behavioural maladjustment in a parent	15	24.1	14	29.8	0.43	-	--
Psychotic history in a sibling	4	6.5	4	8.5	++	0.96	--
Neurotic history in a sibling	7	11.3	7	14.9	0.31	-	--
Behavioural maladjustment in a sibling	3	4.8	1	2.1	++	0.84	--
Behavioural maladjustment in a child	2	3.2	3	6.4	0.10+	-	--
Neurotic traits in childhood	9	14.5	17	36.1	5.76+	-	*
Nervous symptoms in adolescence	3	4.8	10	21.3	5.4+	-	*
Nervous symptoms in early adult life	10	16.1	15	31.9	3.86	-	--
Nervous symptoms in mature adult life	16	25.8	16	34.0	0.87	-	--
Presentation of 'solitary personality'	15	24.2	9	19.1	0.39	-	--
Presentation of 'fearful personality'	7	12.9	7	14.9	0.31	-	--
Presentation of a personality with depressive mood swings	7	11.3	4	8.5	++	0.86	--
Presentation of an 'obsessional personality'	4	6.4	3	6.3	++	0.70	--
Excessive drinking	4	6.4	2	4.2	++	0.96	--
Prescence of chronic physical illness or disability	18	29.0	16	34.0	0.31	-	--
Difficulty in falling asleep or staying asleep (as opposed to early waking)	40	64.5	10	21.2	18.43	-	*
	N = 46		N = 18				
'Hypertension'	19	41.3	6	33.3	0.34	-	--

*Significant at 5% level + Yates correction applied
**Significant at 1% level ++ Fisher's exact treatment used.

significantly higher loading of this symptom.

Table 28 compares the two groups in terms of the form and contents of their illnesses. It will be seen that there is no significant difference in the average duration of the illness but that the affective neurotic group were significantly more likely to have had an illness which caused them to lose more than one week off work or necessitated them calling in an outside agent to manage their domestic affairs. In terms of presenting symptoms the only significant difference found was that "affective neurotics" were more likely to show tension than "other neurotics". This lack of significance is highly important because it underlines the necessity to look for an underlying affective component in a case presenting with phobias, obsessions, hysterical conversion symptoms or somatic symptoms. Statistically speaking, any of these symptoms is just as likely to coincide with the presence of an affective illness as with a psychonneurosis.

In summary it could be said that comparison of these groups indicates that the "other neurotic" group suffers from a significant tendency to symptom formation in early life and the "affective neurotic" group suffers from a physiological upset (insomnia) which is not found significantly in the "other neurotic" group. The "Affective Neurotics" are more likely to be incapacitated by their illness than the "Other Neurotics" but the only symptom, (apart from the presence of depression of mood) useful in the differential diagnosis, is tension, which occurs more frequently in mild affective illness.

Division 4. Social Correlates with Neurosis.

In Phase I there was found some indication that social factors might play an important part in the neuroses of old age. Therefore the "social correlates battery" was given to each patient interviewed (See Appendix 10 for the Social Correlates Battery). Again the "Affective Neurotic" and the "Other Neurotic" groups were compared with the control group in a search for correlations. Table 29 gives the comparisons for the "Other Neurotics" and Table 30 the comparisons for the "Affective Neurotics". Surprisingly few correlations were found. Both groups were very significantly more likely to be regular pill takers. The only other significant finding was an almost total failure to take regular exercise amongst the "Affective Neurotics". This finding was highly significant as compared to the control group and underlines the difficulty in deciding between cause and effect when faced with a significant correlation. Is the inactivity a result of the affective disturbance analogous with retardation?

TABLE 29. Comparison of "Other Neurotics" and controls in possible social correlates

Comparison	Other Neurotics N = 29 Number	%	Controls N = 15 Number	%	Chi sq.	P.	Significance
Taking pills regularly	20	69.0	3	20.0	7.64+	-	**
Not attending a club regularly	21	72.4	11	73.3	++	0.76	--
Not taking an annual holiday away from home	6	20.7	3	20.0	++	0.72	--
Presence of 'unsatisfactory' neighbours	8	27.6	4	26.7	++	0.76	--
Failure to take regular exercise	15	51.7	5	33.3	1.348	-	--
In second or subsequent marriage	5	17.2	0	0	++	0.22	--
Unsatisfactory sex life	4	13.8	2	13.4	++	0.65	--
Declining work record	2	6.9	2	13.4	++	0.21	--
Both spouses working	15	51.7	5	33.3	1.348	-	--
Not self-employed	24	82.7	12	80.0	++	0.51	--
Non-pensionable employment	19	65.5	6	40.0	2.623	-	--
'Unsatisfactory' working life	6	20.7	1	6.6	++	0.45	--
Dissatisfied with medical care	5	17.2	2	13.4	++	0.89	--

*Significant at 5% level
**Significant at 1% level

+Yates correction applied
++Fisher's exact treatment used.

TABLE 30. Comparison of "Affective Neurotics" and controls in possible social correlates.

Comparison	Affective Neurotics from Random Sample N = 16		Controls N = 15		Chi Sq.	P.	Significance
	Number	%	Number	%			
Taking pills regularly	13	81.3	3	20.0	9.31+	-	**
Not attending a club regularly	11	68.7	11	73.3	++	0.91	--
Not taking an annual holiday away from home	5	31.3	3	20.0	++	0.77	--
Presence of 'unsatisfactory' neighbours	4	25.0	4	26.6	++	0.61	--
Failure to take regular exercise	15	93.8	5	33.3	9.85+	-	**
In second or subsequent marriage	4	25.0	0	0.0	++	0.12	--
Unsatisfactory sex life	0	0.0	2	13.3	++	0.45	--
Declining work record	1	6.3	2	13.3	++	0.95	--
Both spouses working	5	31.3	5	33.3	++	0.80	--
Not self-employed	14	87.5	12	80.0	++	0.94	--
Non-pensionable employment	10	62.5	6	40.0	1.57	-	--
'Unsatisfactory' working lives	3	18.7	1	6.7	++	0.65	--
Dissatisfied with medical care	2	12.5	2	13.3	++	0.55	--

*Significant at 5% level
**Significant at 1% level

+Yates correction applied
++Fisher's exact treatment used

Division 5. Validation of the Measurements of "Neuroticism"

If the measurements of "Neuroticism" (i.e. the N score of the Maudsley Personality Inventory and the M - R score of the Cornell Medical Index) are to be shown to have validity they must each correlate with some other measure of "neuroticism", in this case a clinical diagnosis. Furthermore test scores of the two tests given to one population should correlate with each other.

Reference to the findings in Phase I will show that the "neuroticism" score in the M.P.I. correlated significantly with the current presentation of symptoms but not with that group who currently presented symptoms and/or gave a history of neurotic symptoms in the past. The meaning of a "neuroticism" score on the M.P.I. as well as its validity obviously needs close attention.

The M - R scale on the Cornell Medical Index was used as a validation instrument. Brown and Fry (1962) gave this questionnaire to 202 patients in general practice in a validation study of the M - R ("neuroticism") score. Their's was not a geriatric population but their findings are interesting in relation to the data in this study. They found no signficant variation of scores by age, thus concurring with this study. Figure 3 shows the distribution of "neuroticism" scores in the various age groups and the occurrence of neurotic symptoms in the various age groups.

Fig 3 Distribution of the presence of neurotic symptoms with age—whole cornell sample

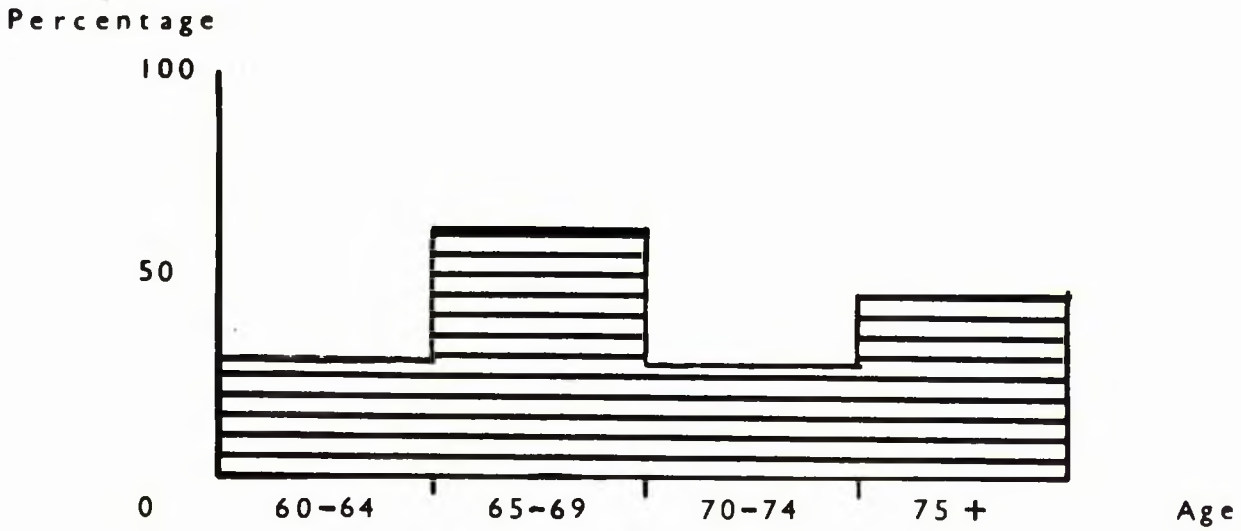
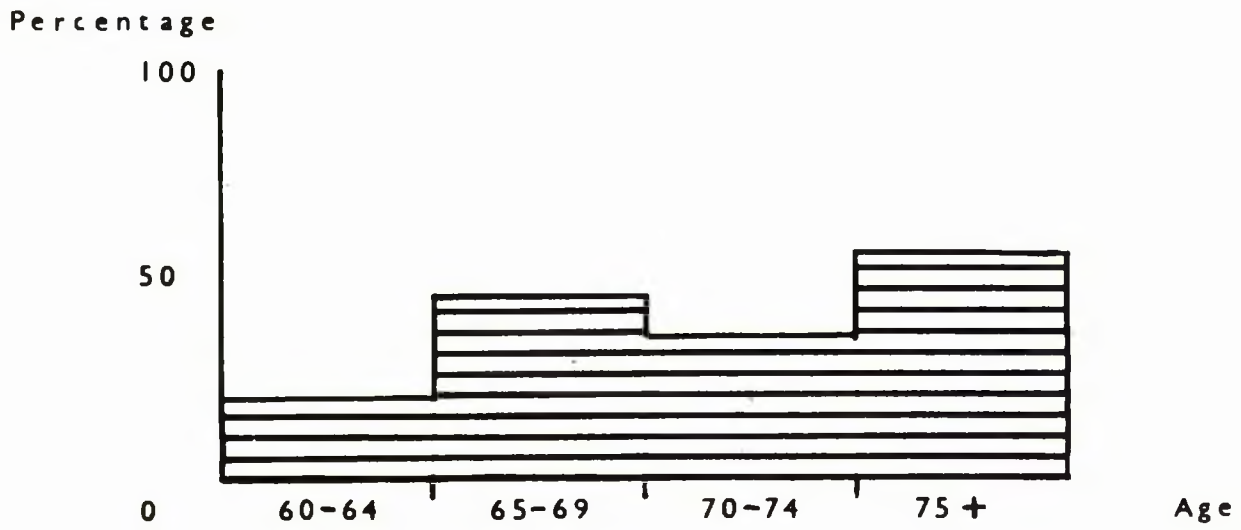


Fig 4 Distribution of "neuroticism" scores with age—whole cornell sample



The distributions are fairly similar but more important, they show that age does not affect either of them. Brown and Fry also found a sex difference in their C.M.I. scores, with females scoring higher than males. Figure 5 shows the distribution of the C.M.I. scores in the Random Sample. It can be seen that the distribution follows a different pattern in the sexes and that the major incidence of female score is in the 20 - 30 range. If, however, one does a student's t test on the total data in this study no significant difference emerges, thus allowing male and female subjects to be treated together. When Brown' and Fry's figures are examined closely, the explanation of the discrepancy emerges. In their normal group the ratio of the mean M - R scores of men to women is 0.896, i.e. women score almost twice as high as men do. In their combined neurotic group ("A + C") the same ratio is 0.485. That is, women score less than 50% more than men. Thus, the significant sex difference in the scores is caused by the loading of the sex difference of the scores of the normal group. The group under study in this work is loaded in the direction of neurotics so one could predict that the sex difference would be eliminated. Lastly, Brown and Fry conclude that a score of 10 on the M-R scale is a suitable cut-off point and that a score of 30 on the total scale in A - R is suitable. Since only the M - R scores have been used in this study Fig. 7

Fig 5 DISTRIBUTION OF TOTAL SCORES ON C.M.I. IN RANDOM SAMPLE — SEX DIFFERENCE

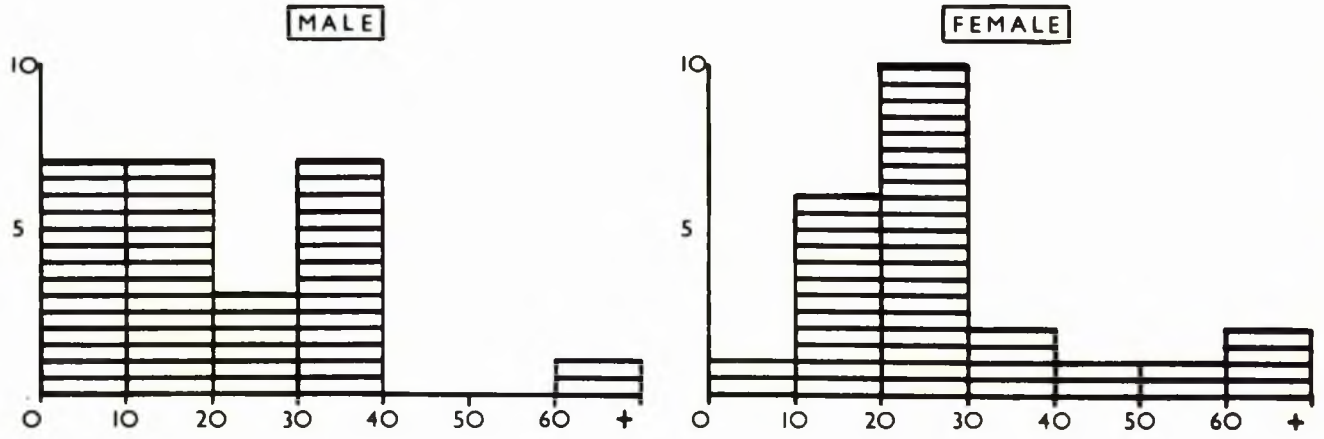
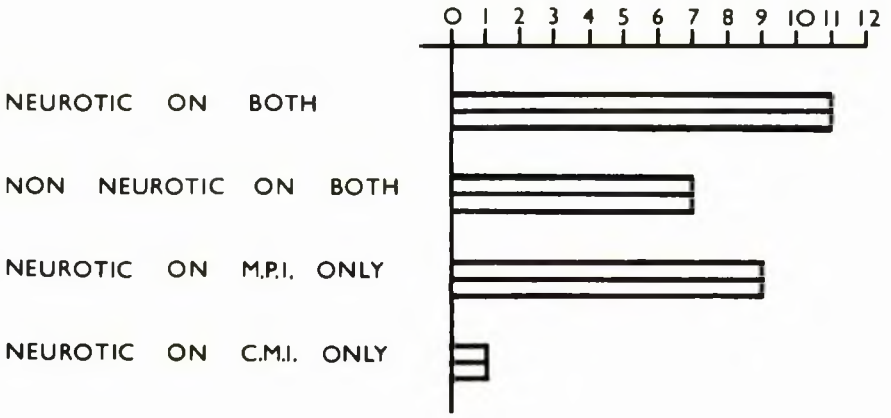


Fig 6 GROUP OF THOSE SUBJECTS WITH BOTH M.P.I. SCORES AND C.M.I. SCORES



has been included to show that the total scale scores follow the same pattern as the M - R scores. In Fig. 7 A should be compared with C and B with D. Remembering that the cut-off point for "neuroticism" is 10 in the M - R scale and 30 in the total scale it will be seen that both C and D have a preponderance of cases below the cut-off point as have A and B. Therefore, one can conclude that, like Brown's and Fry's series, this series shows no discrepancy between M - R scores and total scores. This is evidence in favour of the internal reliability of the C.M.I. questionnaire.

The question of the clinical validation of a "neuroticism" score on the M - R scale of the Cornell Medical Index can now be examined, since age, sex, and total score have been shown not to interfere with this M - R scale.

TABLE 31. Correlation of a "neuroticism" score on C.M.I. with the current display of neurotic symptoms

	Current Symptoms N = 21		No current symptoms N = 40		Chi Sq.	Significance
	Number	%	Number	%		
C.M.I. Score 10+	16	76.2	6	15	19.79+	**

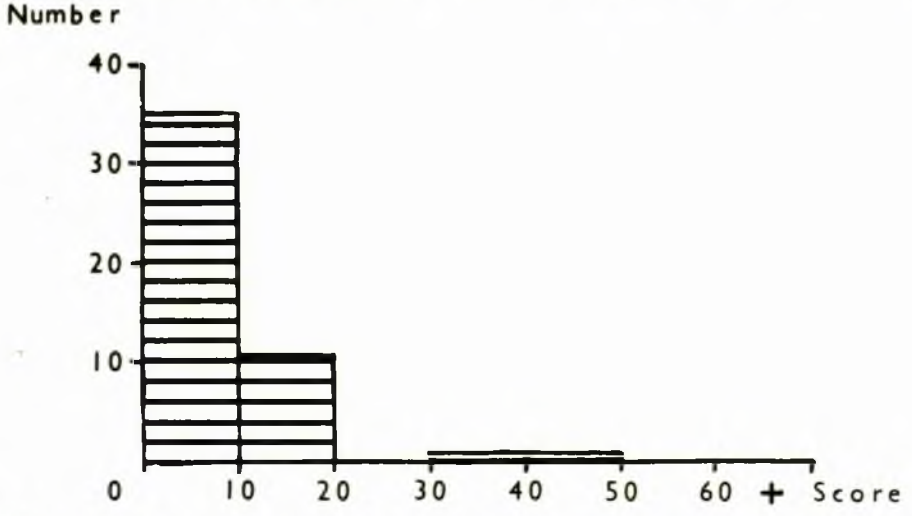
+Yates correction applied
**Significant at 1% level

Table 31 shows that a "neuroticism" score in the C.M.I. correlates significantly with the display of neurotic symptoms at the time of interview.

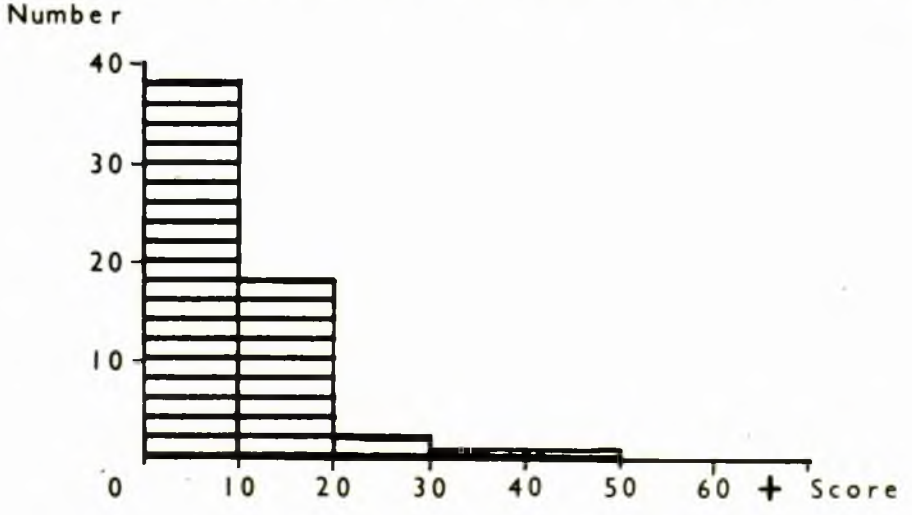
Fig 7

DISTRIBUTION OF C.M.I. SCORES

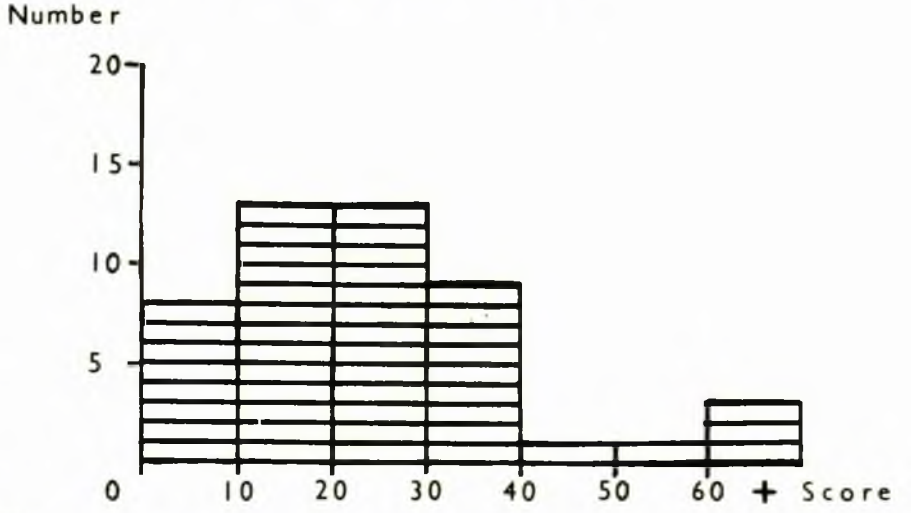
A M–R Neuroticism in random sample



B M–R Neuroticism in whole sample



C Total in random sample



D Total in whole sample

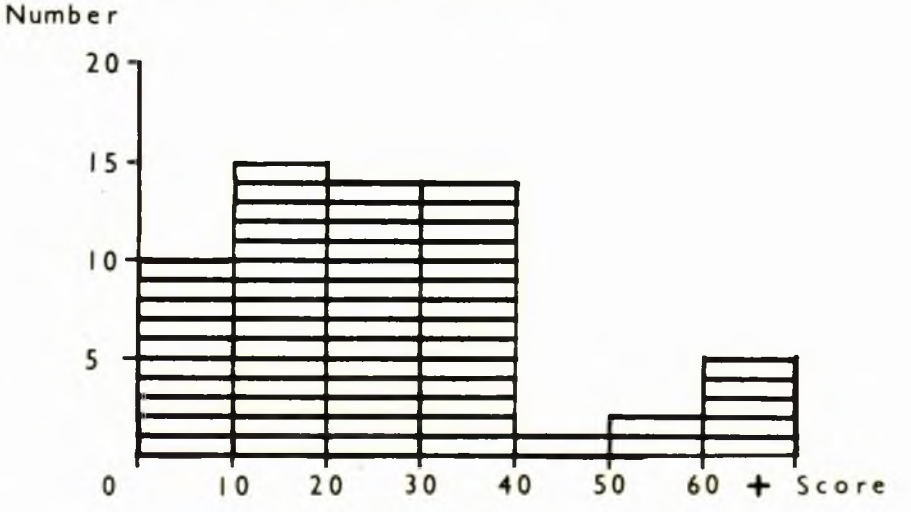


TABLE 32 Correlation of a "neuroticism" score on the C.M.I. with the occurrence of neurotic symptoms in the life history.

	Neurotic symptoms in life history N = 38		No neurotic symptoms in life history N = 23		Chi Sq.	Significance
	Number	%	Number	%		
C.M.I. Score 10+	20	52.6	2	8.7	10.17+	**

+Yates correction applied
**Significant at 1% level

Table 32 shows that a "neuroticism" score on the C.M.I. correlates significantly with the occurrence of neurotic symptoms in the life history.

TABLE 33 Correlation of a "neuroticism" score on the C.M.I. with the presence of an abnormal personality.

	Abnormal Personality N = 23		Normal Personality N = 38		Chi Sq.	Significance
	Number	%	Number	%		
C.M.I. Score 10+	15	52.2	7	18.4	11.65+	**

+Yates correction applied
**Significant at 1% level

Table 33 shows that a "neuroticism" score on the C.M.I. correlates significantly with the presence of an abnormal personality as judged by the author.

TABLE 34. Correlation of a "neuroticism" score on the C.M.I. with the occurrence of neurotic symptoms currently and/or in the past and/or presence of an abnormal personality.

	Symptoms and/or abnormal personality N = 46		Remainder N = 15		Chi Sq.	Significance
	Number	%	Number	%		
C.M.I. Score 10+	21	45.7	1	6.7	5.86+	*

*Significant at 5% level
+Yates correction applied.

Table 34 shows that a "neuroticism" score on the C.M.I. correlates significantly with that group presenting symptoms currently and/or in the past and/or presenting an abnormal personality.

It will be noted that the significance level of the correlations drops from 1% to 5% when the individual items are grouped together. This reflects the stringency of the statistics applied to a small group as in this last case where N = 15.

Thus we have demonstrated that a "neuroticism" score on the C.M.I. M - R scale correlates significantly with all possible clinical criteria of neuroticism both severally and together. This would seem to be a cojent clinical validation of the M - R "neuroticism" scale.

In the validation study it remains to show that Maudsley

Personality Inventory N scale scores and Cornell Medical Index M - R scale scores correlate with each other. 28 subjects completed both an M.P.I. and a C.M.I. questionnaire. The correspondence of the scores is shown graphically in Fig. 6. 18 cases showed concurrence and 10 showed dis cordance using the cut-off criteria of over 19 in the M.P.I. and 10 and over on the C.M.I. When a coefficient of correlation is calculated from the scores they are found to correlate to the 1% level of significance (for expanded working see Appendix 11).

The inter-test reliability is thus shown to be fairly high but certain differences in the interpretation of the test results emerge from the validation study. Figure 6 shows that the M.P.I. scores a group of people neurotic while the C.M.I. scores the same group normal. Therefore in one sphere at least the two tests are measuring different things. An explanation for this discrepancy may possibly be found in Table 35.

TABLE 35. Mean "neuroticism" scores

	Cut-off score
M.P.I.	19
C.M.I.	10.

	Clinically Neurotic	Clinically Non-Neurotic
Mean M.P.I. N-Score	25.3	16.4
Mean Cornell N-Score	9.7	2.2
	Affectives Removed	
Mean M.P.I. N-Score	23.3	16.4
Mean Cornell N-Score	7.4	2.2
	Affectives Only	
Mean M.P.I. N-Score	27.6	16.4
Mean Cornell N-Score	13.0	2.2

Table 35 gives the mean scores for the C.M.I. and the M.P.I. when the cases are separated on clinical criteria into clinically neurotic and clinically non-neurotic. This shows that if one removes these people presenting with affective symptoms the mean C.M.I. score for the neurotic group drops to a very unsatisfactory level. That is, they score a mean of 7.4 when 10 or over is necessary for a "neuroticism" classification. In other words it is the "affective neurotics" who keep the scores of the neurotics high on the C.M.I. scale. (Their mean score will be seen to be 13.0 in Table 35.) The

"affective neurotics" also raise the mean M.P.I. score but without them the "other neurotics" still give a mean score above the cut-off point. It might therefore be concluded that a high M.P.I. score is more an indication of current neurotic illness as opposed to current mild affective illness than a high C.M.I. score. It will be remembered that the C.M.I. "neuroticism" criterion correlated with current symptoms, symptoms in the past history and with abnormal personality. One might conclude that, on clinical grounds, a high C.M.I. score relates more to a life-long tendency to mild affective illness. This contention is supported by Table 36 which shows no correlation between a "neuroticism" score on the C.M.I.

Table 36. Correlation of a "neuroticism" score on the C.M.I. with the "other neurotic" group. (Those cases with a double diagnosis are omitted.)

	Other Neurotics N = 22		Remainder N = 9		P	Significance
	Number	%	Number	%		
C.M.I. Score of 10+	9	40.9	3	33.3	0.51++	--

++ Fisher's Exact treatment used

and the "other neurotic" group. (That is, all the neurotics with those with affective symptoms removed).

Division 6. Composite Clinical Picture of Neurosis in old age.

It will be appreciated that since the data collected in this study included 109 case histories it is desirable to give some impression of the average clinical picture of neurotic illness as it is found in the elderly patient. This can be done by giving the percentage incidence of those bits of information usually considered relevant to clinical assessment of a case.

Those cases with symptoms referrable to minor affective illness will be omitted since minor differences between this group and the remaining neurotics were found. This leaves 47 cases suffering from what has been termed psychoneurosis - a diagnosis made essentially by exclusion, in this study.

Our patient would probably have been a woman since women were slightly commoner than men. The patient came from social class III (53.2%) and her age was 66 years. She gave a positive history of behavioural maladjustment in a parent (30%), she had shown neurotic traits in childhood (36%) and in adolescence (21%). She had suffered from neurotic symptoms in mature adult life (34%), and had tended to live a socially isolated life (19%). She had some difficulty with her sleep (21%) and probably suffered from a chronic physical illness or disability (34%). It is most probable that she had only been socially incapacitated once by her illness (23%) although she had a 1:8 chance of having been socially incapacitated more than three times. Her symptoms could have been of any duration

from under one year to longer than ten years, but if she presented symptoms in her old age these would probably be somatic symptoms (58%), or anxiety (46%). She had a 1:5 chance of presenting either phobic symptoms or hysterical conversion symptoms. As social background information she would admit to taking pills regularly (69%), she would not be a club member or meet a group of friends regularly (72%), and she might mention that she considered her neighbours unsatisfactory (28%). She and her husband would have worked throughout their lives (52%) in non pensionable employment (65%). She would have a 1:5 chance of claiming as unsatisfactory, her marriage, her working life, her medical care and, to a lesser extent, her sex life.

Having pictured the "average case" it is worth emphasizing the occurrence of the rarity. The review of the literature revealed the opinion that psychoneurosis occurring for the first time in old age is a rarity. Of the 134 cases examined in this study 41 presented symptoms for the first time in old age, and only 7 of these were free of affective symptoms. Of these 7, 4 had had a personality abnormality but had been free of neurotic symptoms till old age.

DISCUSSION OF FINDINGS OF PHASE II.

The method of clinical investigation of a ser ies of populations, and of validation of psychometric tests against clinical opinion is in the last analysis subjective. Realising this, the author was at pains to reach his diagnosis more by exclusion of symptoms for which he carefully searched, than by any "neurotic quality" in the patient's account of himself. Furthermore, he could be fairly confident that the case histories extracted from the records of the Bethlem Royal and Maudsley Hospitals represented the end products of an equally careful screening process. Grouping and sub-grouping for various purposes makes for an intricate and inelegant experimental design but it does have the advantage that the author feels confident that there is little contamination in areas where subjective assessment is called for. In the statistical analysis the lack of control subjects, 15 in all, meant that elaborate precautions had to be taken. In a sense this also was the result of the "blindness" of the study. The clinical diagnoses were not made until all the data had been collected to prevent the author from, for example, leading a neurotic subject into describing a behavioural maladjustment in his parent where, in the course of normal questioning, such a description would not have occurred to him. Therefore it was after the case summaries had been written that it was found that only 15 subjects were free of all suspicion of

mental illhealth.

Comment has already been made on specific findings in each of the six divisions of Phase II. It remains to discuss the general implications of the findings.

The lack of distinctive differences in the family histories between both the "affective neurotics" and the "other neurotics" as compared with the control group is remarkable. The tendency towards disturbed families is evident but only significant in one aspect. The geriatric age group is the group most favourable for showing such correlations if they do exist. That is, if questioning whether a neurotic parent breeds a neurotic child, one should wait until the death of that child before being sure that the neurosis has not appeared in the second generation. It would be slightly naive to expect a high correlation using specific clinical descriptions, especially since one cannot be certain that these labels carry homogeneity in aetiology. The trend is demonstrated in these figures but a full scale genetical analysis would be required to take this problem further.

"In-patient neurotics" are shown to be essentially similar to "domestic neurotics" except that they carry a higher loading of affective illness. Does this mean that the "in-patient neurotics" could equally well be treated at home, or does it mean that those neurotic old people living in their homes would benefit from hospitalization?

Some clinical differences have been demonstrated between

"affective neurotics" and "other neurotics". These differences were not dramatic but if one assumes on a priori grounds that the "other neurotic" group is more heterogeneous in terms of aetiology than the "affective neurotic" group, then this study adds support to the view that the differentiation is worth making.

The "Social Correlates Battery" was designed empirically and was not very successful in finding correlations with neurotic illness. The review of the literature revealed several works which tended to show that the neuroses of old age produced little effect on the community in terms of hospitalization, on the family in terms of financial and emotional strain, and on the General Practitioner in terms of calls for his help. It may be that neurotic illness in these old people is kept to themselves, encapsulated as it were, but the personal distress caused is evidenced by their readiness to unburden themselves to a sympathetic research worker.

The validation study described here is simply an attempt by the author to make the best use of the tools available to him. The measures he uses are crude, but it is difficult to see how more refined measurements can be made until the Maudsley Personality Inventory and the Cornell Medical Index are standardized for age in the geriatric range.

Future work suggested by this exploratory study should be based on a longitudinal study of the outcome of the two main groups of neuroses when they present in the geriatric

age group. The effects of treatment by chemotherapy and psychotherapy on these prognostic patterns could then be studied. Remembering the effects of ageing on the learning process, a study of the effects of behaviour therapy on the "other neurotic" group would be of great academic interest.

In the light of the findings in this study the M.P.I. N scale and the C.M.I. M - R scale could be used jointly to give a preliminary screening of cases, thus eliminating the laborious case history taking at present necessary to arrive at a diagnosis of "affective neurotic" or "other neurotic". A clinical check would still be necessary after the group was obtained, but much time could be saved in this way.

SUMMARY OF PHASE II

Phase II was designed to allow of a clinical analysis of old people suffering from neurotic symptoms. In addition, a successful validation study of two measures of "neuroticism" was performed. 134 case histories and mental states taken by the author himself or extracted from in-patient hospital records, were examined. The information was coded to allow of statistical treatment. Significant differences between various clinically meaningful groups were found. In particular, differences were found between the "affective neurotic" group and the remainder. An assessment of the social correlates of the neuroses of old age showed few significant correlations. The natural history of the "average patient" with neurotic illness was outlined, with the exception of the prognosis. The method and the results were discussed.

SUMMARY.

1. The work was divided into two phases. Phase I was designed primarily to discover the most fruitful source of neurotic illness in the population aged 60 and over. Phase II represents a clinical assessment of groups of patients with neurosis in this age group.

2. The material will be presented here as it is in the thesis. Phase I and Phase II are treated separately and divided into introduction, material, method and results.

3. The review of the literature led to the belief that any objective measure of "neuroticism" would require correction for the degree of organic brain damage present. Therefore, the N scale on the Maudsley Personality Inventory was used as a measure of "neuroticism", and the Inglis Paired Associate Learning Test was used simultaneously as a measure of organ brain damage.

METHOD:

4. Six geriatric populations were sampled and subjects interviewed in order to administer these two measures. In addition certain social and medical information was obtained. In particular it was ascertained whether or not the subject was complaining of symptoms of mental illness currently, or had suffered from psychiatric symptoms in the past.

MATERIAL:

5. The six populations investigated in this way were:-

   1. A psychiatric geriatric out-patient's clinic.
   2. A medical geriatric out-patient's clinic.
   3. A general geriatric population.
   4. A geriatric population attend a general practitioner's surgery with complaints diagnosed as "nervous".
   5. A London County Council Home for Aged Ladies.
   6. A female geriatric admission ward of a General Psychiatric Hospital.

6. The data collected was treated statistically and the results follow.

RESULTS:

7. "Neuroticism" scores were found to be independent of brain damage scores.
8. The groups varied in the amount of "neuroticism" they contained and in their age distribution.
9. "Neuroticism" was shown to be significantly higher in the surgery sample, while the home sample and the random sample showed no difference in "neuroticism"
10. Age was shown to be significantly highest in the home sample, while the random sample and the surgery sample did not differ in age.
11. It was therefore deduced that age differences do not account for the differences in "neuroticism" scores.

12. Subjects in the random sample were more likely to be living with a spouse than those in the surgery sample.
13. Clinical correlates of a high "neuroticism" score were found.
14. The findings of Phase I were discussed and summarised.

PHASE II.

15. The clinical study encompassed by Phase II was designed to show how the neurotic old person differed from his normal counterpart, how the mild affective illness of old age differed from the remaining psychoneuroses of old age, and how the clinical picture of the illness determined whether the patient would or would not be admitted to hospital.

MATERIAL:

16. Three populations were interviewed: those subjects already seen in the Random Sample and the Surgery Sample who consented to a second interview, and a further Random Sample taken from a general practitioner's list of people over 60. In all, 61 people were interviewed.

METHOD:

17. Interviews consisted of taking a complete psychiatric case history, mental state, cognitive function assessment, near relatives' testimony and estimates of certain spheres of the subject's social back ground. In addition the Cornell Medical Index was administered to provide a validation study of the earlier measure of "neuroticism".

18. The number of neurotic cases was increased by analysing the case records of consecutive neurotic admissions, aged 60 and over to the Maudsley and Bethlem Royal Hospitals, over a five year period (73 cases).

19. The author examined all case records, and having summarised those with any abnormality, he assigned a diagnosis to each case.

20. The information obtained by interview and from case histories was coded and punched onto cards to facilitate statistical treatment.

RESULTS:

21. The "other neurotic" group was significantly more likely to give a history of behavioural maladjustment in a parent than was the control group.

22. A trend towards psychiatric disturbance in the family histories of both the "affective neurotic" and the "other neurotic" groups did not reach significance.

23. The in-patient group contained a significantly higher proportion of mild affective disorders than did those neurotics surviving at home.

24. The significant differences between the "affective neurotics" and the "other neurotics" lay in the "affective neurotics" presenting insomnia, and the "other Neurotics" giving a positive history of symptoms in their early life.

25. Social correlates with neurosis consisted of the following: Both "affective neurotics" and "other neurotics" were significantly more likely to be regular pill takers than were controls. The "affective neurotics" took little in the way of regular exercise and significantly less than the control group.

26. Scores on the Cornell Medical Index were shown to correlate significantly with scores on the Maudsley Personality Inventory, and clinical criteria for neurosis correlated with high scores on the Cornell Medical Index. There were indications that the internal reliability of the Cornell Medical Index was high.
27. Differences in the interpretation of these two tests were discussed.
28. A clinical picture of the "average case" presenting with a psychoneurosis was drawn.
29. The findings of Phase II were discussed and summarised.

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APPENDICES.

INDEX TO APPENDICES.

APPENDIX 1.

DEFINITIONS.

Author's diagnosis: Diagnosis assigned to each case by the author after scrutiny of the case history. Diagnoses follow the pattern outlined in Fig. 1.

Geriatric subject: subject aged 60 or over.

Geriatric patient: person aged 60 or over who has a complaint which he presents spontaneously to a doctor.

Groups: See folding sheet for ready reference.

Hypertension: a diastolic blood pressure 100 or over.

"Neuroticism": a hypothetical mental state causing a score of over 19 on the N scale of the M.P.I. or a score of 10 or over on the M - R scale of the C.M.I.

Neurotic symptom: See text.

Personality disorder: a personality demonstrating distressing traits which are traceable to childhood or adolescence and which fluctuate in terms of the distress which they cause.

Psychoneurosis: a state in which neurotic symptoms distress an apparently stable personality.

Psychosomatic disorder: Empirically this group consisted of cases presenting with asthma, migraine, peptic ulcer, hypertension, thyrotoxicosis, rheumatoid arthritis. Skin conditions were not included.

Social Class: by Classification of Occupations, H.M.S.O. 1964.

Social Correlates Battery: a questionnaire used in Phase II to assess the possible effects of neurotic illness on the lives of the subjects (See Appendix 10).

Social Incapacity: More than one week taken off work or outside help necessitated to maintain the home.

System diagnosis: The General Practitioner would decide to which system the patient's symptoms were referable, e.g. alimentary, C.N.S., nervous, etc.

R.S.1 Random Sample 1: 33 cases from a General Practitioner's list of patients over 60.

R.S.2 Random Sample 2: 15 of these 33 who consented to a second interview.

R.S.3 Random Sample 3. the remaining 67 cases of 100 initially taken at random - 33 of these consented to interview.

S.S.1 Surgery Sample 1: 32 patients attending a General Practitioner's surgery over a two month period and diagnosed by him as "nervous" - 20 of these were interviewed.

S.S.2 Surgery Sample 2: 13 of the above who consented to a second interview.

H.S. Home Sample: 20 cases at Random from a Home for Aged Ladies.

P.O.P. Sample: Psychiatric out-patient Sample: those cases presenting with neurotic symptoms in the 4 months

surveyed.

M.O.P. Sample: Medical out-patient Sample, those cases presenting with neurotic symptoms in the 4 months surveyed.

N.I.P. Sample: Neurotic in-patient Sample, those cases diagnosed as psychoneurotic in the Joint Hospitals over a 5 year period.

Affective Neurotics: those subjects with symptoms relating to depression of affect.

Other Neurotics: The whole neurotic group minus the "affective neurotics".

Domestic Neurotics: those cases designated as neurotic and surviving at home.

Controls: those cases judged free of all mental illhealth after clinical examination.

Inglis P.A.L.T.: Inglis Paired Associate Learning Test.

C.M.I.: Cornell Medical Index Health Questionnaire.

M.P.I.: Maudsley Personality Inventory.

R.S.1 Random Sample 1: 33 cases from a General Practitioner's list of patients over 60.

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M.O.P. Sample: Medical out-patient Sample: those cases presenting with neurotic symptoms in the 4 months surveyed.

N.I.P. Sample: Neurotic in-patient Sample, those cases diagnosed as psychoneurotic in the Joint Hospitals over a 5 year period.

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Inglis P.A.L.T.: Inglis Paired Associate Learning Test.

C.M.I.: Cornell Medical Index Health Questionnaire.

M.P.I.: Maudsley Personality Inventory.

APPENDIX 2.

BOOKLET FOR PHASE I

NAME: SOURCE

ADDRESS: AGE:

1. OCCUPATION
2. DURATION OF RETIREMENT
3. WEEKLY INCOME NOW
4. WORK RECORD
5. DOMICILE
6. LIVING ALONE
7. LIVING WITH SPOUSE
8. LIVING WITH FIRST DEGREE RELATIVE
9. DURATION OF PRESENT ARRANGEMENT
10. SINGLE, MARRIED, DIVORCED, SEPARATED COHABITING, WIDOWED.

SYMPTOMS

14. BY PATIENT

16. BY RELATIVE

15. FROM PATIENT

17. FROM RELATIVE

THE MILL HILL VOCABULARY SCALE

FORM I SENIOR (1948) WAS USED HERE.

MAUDSLEY PERSONALITY INVENTORY.

The relevant questions used for the N scale follow:-

2. Do you sometimes feel happy, sometimes depressed, without any apparent reason?
3. Does your mind often wander while you are trying to concentrate?
6. Are you frequently "lost in thought" even when supposed to be taking part in a conversation?
7. Are you sometimes bubbling over with energy and sometimes very sluggish?
10. Are you inclined to be moody?
11. Do you have frequent ups and downs in mood, either with or without apparent cause?
13. Are your daydreams frequently about things that can never come true?
15. Are you inclined to ponder over your past?
17. Do you ever feel "just miserable" for no good reason at all?
19. Do you often find that you have made up your mind too late?
21. Have you often lost sleep over your worries?
23. Are you often troubled about feelings of guilt?
25. Are your feelings rather easily hurt?
27. Would you rate yourself as a tense or "highly-strung" individual?
29. Do you often experience periods of loneliness?
31. Do you like to indulge in a reverie (daydreaming)?
33. Do you spend much time in thinking over good times you have had in the past?

35. Have you often felt listless and tired for no good reason?

37. After a critical moment is over, do you usually think of something you should have done but failed to do?

39. Do ideas run through your head so that you cannot sleep?

41. Have you ever been bothered by having a useless thought come into your mind repeatedly?

43. Are you touchy on various subjects?

45. Do you often feel disgruntled?

47. Do you have periods of such great restlessness that you cannot sit long in a chair?

INGLIS PAIRED ASSOCIATE LEARNING TEST

		0	1	2	3	4	5	6	
Cabbage	Pen	1	1	1	3	randomised			Trials
Knife	Chimney	2	3	2	2	order of			to
Sponge	Trumpet	3	2	3	1	presentation			90

APPENDIX 3.

LIST OF SYMPTOMS DISCOVERED

(symptoms not included if adequate cause for them had been found).

A. SOMATIC

Respiratory system: dyspnoea, pains in chest.

Cardiovascular: migraine, occipital headache, frontal headache, pressure on head, palpitations, dizzy turns, fainting.

Alimentary: tense feeling in left Inguinal Fossa, wind in stomach, anorexia, epigastric tension, stomach all on the work.

Somatic: legs weak, pains under nails, collapse, pains all over body, pain in lower back, tremor arm, cramps in the ankles.

Other: feeling of pressure in left breast, cannot chew, exhaustion, insomnia, trembling hands, excessive perspiration, dazzling in front of eyes, dog eyed, hands very dry, amnesia, always complaining about something.

B. PSYCHIC

Fears of: going down streets, having a stroke, blowing one's nose, having a tumour on the brain, going into an empty house, crowds, trains, death, everything, traffic, suffocation.

Symptoms related to depression: depressed, lack of concentration, weepy, slow, indecisive, lack of interest in surroundings, apathy, guilty, feeling of badness, nervous debility, intolerance of noise, easy fatiguability.

Other: tense, nervy, antisocial, whining manner, aggression, suspicious, irrelevant conversation, excitable, fastidious, particular, cannot bear things out of place, quarrelsome, want to throw things, irritable, jumpy, stammer, puts on airs, secretive.

APPENDIX 4.

RANDOM SAMPLE 1	E.E.	T.W.	E.W.	J.R.	J.T.	E.D.	F.B.	D.S.	R.P.	M.S.
	M.	F.	F.	M.	M.	F.	F.	F.	M.	F.
AGE	64	67	73	69	78	71	61	60	88	92
PRESENCE OF ANY NEUROTIC SYMPTOMS NOW	-	-	-	-	-	-	x	-	-	x
"NEUROTICISM" SCORE	28	14	2	32	34	32	12	34	-	20
PAST HISTORY OF MENTAL SYMPTOMS	x	-	-	-	-	-	-	x	-	x
PAST HISTORY NEUROTIC OR PSYCHOTIC	N	-	-	-	-	-	-	-	-	N
INGLIS SCORE	5	7	17	7	15	4	15	4	-	93
SYNONYMS SCORE	26	15	9	21	14	23	20	23	-	2
LIVING ALONE	-	x	-	-	x	-	-	-	-	x Home
LIVING WITH SPOUSE	x	-	x	x	-	-	x	x	-	-
LIVING WITH FIRST DEGREE RELATIVE	-	-	-	-	-	x	-	-	x	-
PSYCHOSOMATIC DISEASE PRESENT	-	-	-	x	-	-	-	x	-	-
CORRESPONDING I.Q. LEVEL	119	95	88	107	94	112	103	112	-	81
"NEUROTICISM" OVER 19.	x	-	-	x	x	x	-	x	-	x
CASE NUMBER	12	13	14	15	16	17	18	19	20	21

RANDOM SAMPLE I	M.K. F.	C.McN. M.	E.S. F.	D.S. M.	M.I. F.	H.C. F.	E.H. F.	J.Q. M.	R.B. M.	D.W. M.	A.F. M.
AGE	66	67	72	60	66	63	61	70	62	63	72
PRESENCE OF ANY NEUROTIC SYMPTOMS NOW	x	-	-	-	x	x	-	-	-	-	-
"NEUROTICISM" SCORE	18	6	26	2	0	26	22	32	6	6	18
PAST HISTORY OF MENTAL SYMPTOMS	-	-	-	-	-	x	-	-	-	x	-
PAST HISTORY NEUROTIC OR PSYCHOTIC	-	-	-	-	-	-	-	-	-	H	-
INGLIS SCORE	5	3	22	26	8	7	5	4	6	4	4
SYNONYMS SCORE	15	34	11	13	30	14	26	15	18	20	30
LIVING ALONE	-	-	-	-	-	-	-	-	-	-	x
LIVING WITH SPOUSE	x	x	x	x	-	x	x	x	x	x	-
LIVING WITH FIRST DEGREE RELATIVE	-	-	-	-	x	-	-	-	-	-	-
PSYCHOSOMATIC DISEASE PRESENT	-	-	x	-	-	-	-	x	-	x	-
CORRESPONDING I.Q. LEVEL	95	141	90	92	129	94	119	95	100	103	129
"NEUROTICISM" OVER 19.	-	-	x	-	-	x	x	x	-	-	-
CASE NUMBER	1	2	3	4	5	6	7	8	9	10	11

APPENDIX 5.

SURGERY SAMPLE 1	C.J.	W.M.	T.M.	N.Q.	E.R.	T.O.	A.P.	P.T.	G.C.	G.B.
	F.	M.	F.	F.	F.	M.	M.	F.	F.	M.
AGE	62	79	78	62	70	62	70	83	65	64
PRESENCE OF ANY NEUROTIC SYMPTOMS NOW	-	x	x	x	x	-	x	x	x	x
"NEUROTICISM" SCORE	17	28	28	31	22	21	19	30	26	26
PAST HISTORY OF MENTAL SYMPTOMS	x	x	-	-	-	x	x	-	x	x
PAST HISTORY NEUROTIC OR PSYCHOTIC	N	N	-	-	-	-	N	N	N	N
INGLIS SCORE	4	4	9	6	5	4	10	5	10	8
SYNONYMS SCORE	25	7	13	20	19	30	11	17	10	11
LIVING ALONE	-	-	x	x	x	-	-	-	-	-
LIVING WITH SPOUSE	x	-	-	-	-	x	x	-	x	x
LIVING WITH FIRST DEGREE RELATIVE	-	x	-	-	-	-	-	x	-	-
PSYCHOSOMATIC DISEASE PRESENT	-	-	-	-	-	-	-	x	-	-
CORRESPONDING I.Q. LEVEL	117	86	92	103	102	129	90	98	89	90
"NEUROTICISM" OVER 19	-	x	x	x	x	x	-	x	x	x
CASE NUMBER	22	23	24	25	26	27	28	29	30	31

SURGERY SAMPLE 1	V.A.	E.S.	A.W.	M.M.	H.B.	L.D.	C.D.	M.M.	E.M.	M.R.
	F.	F.	F.	F.	F.	M.	F.	F.	M.	F.
AGE	65	67	64	74	72	63	64	65	64	65
PRESENCE OF ANY NEUROTIC SYMPTOMS NOW	x	x	x	x	x	-	-	-	x	-
"NEUROTICISM" SCORE	40	42	20	34	24	9	34	16	40	14
PAST HISTORY OF MENTAL SYMPTOMS	x	x	x	x	-	x	x	x	-	x
PAST HISTORY NEUROTIC OR PSYCHOTIC	-	N	N	N	N	N	-	N	-	N
INGLIS SCORE	22	16	3	6	14	4	8	8	9	12
SYNONYMS SCORE	16	15	16	26	14	18	6	15	19	14
LIVING ALONE	-	x	-	x	x	-	-	x	-	x
LIVING WITH SPOUSE	-	-	-	-	-	x	x	-	-	-
LIVING WITH FIRST DEGREE RELATIVE	x	-	x	-	-	-	-	-	x	-
PSYCHOSOMATIC DISEASE PRESENT	-	-	-	-	-	-	-	-	-	-
CORRESPONDING I.Q. LEVEL	97	95	97	119	94	100	85	95	102	94
"NEUROTICISM" OVER 19	x	x	x	x	x	-	x	-	x	-
CASE NUMBER	32	33	34	35	36	37	38	39	40	41

APPENDIX 6.

HOME SAMPLE	E.P. F.	E.S. F.	M.S. F.	E.T. F.	C.L. F.	R.T. F.	E.W. F.	S.A. F.	M.N. F.	M.S. F.
AGE	96	87	79	80	82	81	71	82	90	92
PRESENCE OF ANY NEUROTIC SYMPTOMS NOW	-	x	-	-	-	-	x	x	x	x
"NEUROTICISM" SCORE	30	24	21	27	6	14	28	9	18	20
PAST HISTORY OF MENTAL SYMPTOMS	-	-	x	x	-	-	-	-	-	x
PAST HISTORY NEUROTIC OR PSYCHOTIC	-	-	N	N	-	-	-	-	-	N
INGLIS SCORE	36	35	67	13	93	88	5	21	9	93
SYNONYMS SCORE	6	9	7	17	0	4	18	8	21	2
PSYCHOSOMATIC DISEASE PRESENT	-	x	-	-	-	-	x	-	-	-
CORRESPONDING I.Q. LEVEL	85	88	86	98	80	83	100	87	107	81
"NEUROTICISM" OVER 19	x	x	x	x	-	-	x	-	-	x
CASE NUMBER	52	53	54	55	56	57	58	59	60	61

HOME SAMPLE	H.C. F.	A.F. F.	A.A. F.	E.A. F.	C.M. F.	A.L. F.	A.G. F.	C.H. F.	E.M. F.	F.R. F.
AGE	80	84	75	77	91	78	84	70	62	91
PRESENCE OF ANY NEUROTIC SYMPTOMS NOW	-	x	x	x	-	x	-	-	-	x
"NEUROTICISM" SCORE	10	30	11	24	24	3	27	8	24	38
PAST HISTORY OF MENTAL SYMPTOMS	-	x	-	x	-	-	-	-	-	-
PAST HISTORY NEUROTIC OR PSYCHOTIC	-	N	-	N	-	-	-	-	-	-
INGLIS SCORE	9	34	45	13	65	5	87	50	34	4
SYNONYMS SCORE	15	6	4	16	3	6	6	3	9	8
PSYCHOSOMATIC DISEASE PRESENT	-	-	-	-	-	-	-	-	-	-
CORRESPONDING I.Q. LEVEL	95	85	83	97	82	85	85	82	88	87
"NEUROTICISM" OVER 19	-	x	-	x	x	-	x	-	x	x
CASE NUMBER	42	43	44	45	46	47	48	49	50	51

APPENDIX 7.

	MEDICAL OUT-PATIENT SAMPLE		PSYCHIATRIC OUT-PATIENT SAMPLE					
	V.P. F.	S.B. F.	F.L. F.	A.G. M.	V.B. F.	D.C. F.	J.F. F.	G.H. F.
AGE	74	81	62	66	72	74	67	68
PRESENCE OF ANY NEUROTIC SYMPTOMS NOW	x	-	x	x	-	x	x	x
"NEUROTICISM" SCORE	41	28	26	38	18	18	31	24
PAST HISTORY OF MENTAL SYMPTOMS	x	x	x	x	x	x	x	-
PAST HISTORY NEUROTIC OR PSYCHOTIC	N	N	N	N	N	N	N	-
INGLIS SCORE	9	5	14	6	3	25	4	6
SYNONYMS SCORE	13	6	12	22	6	4	10	22
LIVING ALONE	-	-	x	-	-	x	x	x
LIVING WITH SPOUSE	x	-	-	x	-	-	-	-
LIVING WITH FIRST DEGREE RELATIVE	-	x	-	-	x	-	-	-
PSYCHOSOMATIC DISEASE PRESENT	-	-	-	-	-	-	-	-
CORRESPONDING I.Q. LEVEL	92	85	91	110	85	83	89	110
CASE NUMBER	62	63	64	65	66	67	68	69

APPENDIX 8.

TABLE 7: "Neuroticism" scores on M.P.I.

Random Sample 1		Surgery Sample 1		Home Sample	
Case Number	N - M.P.I.	Case Number	N - M.P.I.	Case Number	N - M.P.I.
1	18	22	17	42	10
2	6	23	28	43	30
3	26	24	28	44	11
4	2	25	31	45	24
5	0	26	22	46	24
6	26	27	21	47	3
7	22	28	19	48	27
8	32	29	30	49	8
9	6	30	26	50	24
10	6	31	26	51	38
11	18	32	40	52	30
12	28	33	42	53	24
13	14	34	20	54	21
14	2	35	34	55	27
15	32	36	24	56	6
16	34	37	9	57	14
17	32	38	34	58	28
18	13	39	16	59	9
19	34	40	40	60	18
21	20	41	14	61	20

TABLE 8: Age distribution in the Groups.

Random Sample 1		Surgery Sample 1		Home Sample	
Case Number	Age	Case Number	Age	Case Number	Age
1	66	22	62	42	80
2	67	23	79	43	84
3	72	24	78	44	75
4	60	25	62	45	77
5	66	26	70	46	91
6	63	27	62	47	78
7	61	28	70	48	84
8	70	29	83	49	70
9	62	30	65	50	62
10	63	31	64	51	91
11	72	32	65	52	96
12	64	33	67	53	87
13	67	34	64	54	79
14	73	35	74	55	80
15	69	36	72	56	82
16	78	37	63	57	81
17	71	38	64	58	71
18	61	39	65	59	82
19	60	40	64	60	90
21	92	41	65	61	92

TABLE 9: Inglis P.A.L.T. Scores.

Random Sample 1		Surgery Sample 1		Home Sample	
Case Number	P.A.L.T.	Case Number	P.A.L.T.	Case Number	P.A.L.T.
1	5	22	4	42	9
2	3	23	4	43	34
3	22	24	9	44	45
4	26	25	6	45	13
5	8	26	5	46	65
6	7	27	4	47	5
7	5	28	10	48	87
8	4	29	5	49	50
9	6	30	10	50	34
10	4	31	8	51	4
11	4	32	22	52	36
12	5	33	16	53	35
13	7	34	3	54	67
14	17	35	6	55	13
15	7	36	14	56	93
16	15	37	4	57	88
17	4	38	8	58	5
18	15	39	8	59	21
19	4	40	9	60	9
21	93	41	12	61	93

TABLE 10: M.S. F. act 92 was common to the Random 1 Sample and the Home Sample and was therefore omitted from the statistics.

ANALYSIS OF COVARIANCE OF NEUROTICISM SCORES WITH INGLIS SCORES.

Group	I	N	I^2	IN	N^2
R	261	370	10959	2784	9508
S	167	521	1829	4736	15141
H	806	396	51690	15028	9562
Total	1234	1287	64478	24358	34211

CORRECTION TERMS.

R	3406.50	4828.50	6845.00
S	1394.45	4350.35	13572.05
H	32841.80	15958.80	7840.80
Total	37282.75	25137.65	28257.85
All cases	25379.27	26469.30	27606.15
Between groups	11903.48	-1331.65	651.70
Within groups	27195.25	-779.65	5953.15
Total	39098.73	-2111.30	6604.85
	I	IN	N
Within R	7552.50	-234.50	2663.00
S	434.55	385.65	1568.95
H	19208.20	-930.80	1721.20
	Variance of I S sqrs	Covariance of I with N S Prods	Variance of N S sqrs

TABLE 10 (contd.)

Correlation can be estimated for each group separately

thus in Group R $r_{in} = -234.50/(7552.50 \times 2663.00)^{\frac{1}{2}}$

Groups S and H similarly.

General estimate within groups

$$r_{in} = -779.65/(27195.25 \times 5953.15)^{\frac{1}{2}}$$

all groups combined

$$= -2111.30/(-39098.75 \times 6604.85)^{\frac{1}{2}}$$

Estimate within group = -779.65/12723.89 = -.0613

Dependence of N on I within groups

	Sum sqs.	d.f.	m.sq. variance
Total	5953.15	57	
Accounted for by regression on I	$(-779.65)^2/27195.25$		
	= 22.35	1	22.35
	5930.80	56	105.60

A Residual Variance

F 22.35/105.60 i.e. not significant with one and 56 degrees of freedom.

TABLE 10 (Contd.)

Consider whether the correlation is the same on all these groups

	S. sqs.	a/c for	residual	d.f.	mean sq.
In group R	2663.00	7.28	2655.72	18	
S	1568.95	342.25	1530.38	18	
H	1721.20	45.10	1676.10	18	
B Residual, distinguishing between regression rated in different groups			5862.20	54	108.56
Resid. A - Resid. B			50.60	2	25.30

$F = 25.30/108.56$ i.e. not significant with 2 and 54 degrees of freedom.

TABLE 10 (Contd.)

Consider whether the correlation is the same on all these groups

	S. sqs.	a/c for	residual	d.f.	mean sq.
In group R	2663.00	7.28	2655.72	18	
S	1568.95	342.25	1530.38	18	
H	1721.20	45.10	1676.10	18	
B Residual, distinguishing between regression rated in different groups			5862.20	54	108.56
Resid. A - Resid. B			50.60	2	25.30

$F = 25.30/108.56$ i.e. not significant with 2 and 54 degrees of freedom.

APPENDIX 9.

INFORMATION BITS ON CASES IN PHASE II

Family history positive for parent

1. Psychotic
2. Neurotic
3. Behavioural maladjustment

Family history positive for sibling

4. Psychotic
5. Neurotic
6. Behavioural maladjustment
7. History of neurotic traits in childhood positive (Birth - 12 years).
8. History of nervous symptoms in adolescence positive (13 - 17 years)
9. History of nervous symptoms in early adult life positive (18 - 44 years)
10. History of nervous symptoms in mature adult life positive (45 - 59 years)
11. History of nervous symptoms in old age positive 60+
12. History of nervous symptoms arising for the <u>first time</u> in old age.
13. Personality described as solitary.
14. Personality described as fearful, anxious or hypochondriacal.
15. Personality showing marked mood swings with depression.
16. Personality described as obsessional without compulsion i.e. meticulous.
17. Smokes more than 20/day.

18. Drinks excessively (in opinion of nearest relative)

19. Religiously non active

20. Presence of a chronic medical illness or chronic physical disability.

Average duration of time during which nervous symptoms were present (illnesses averaged if there was more than one).

21. Under one year

22. 1 - 2 years.

23. 3 - 5 years.

24. 6 - 10 years.

25. 11 - 20 years.

26. 21 - 30 years.

27. 31 - 40 years.

28. 41 - 50 years.

29. 51 - 60 years.

30. 60 + years

Number of times socially incapacitated by nervous symptoms.

31. Once

32. Twice

33. Three times

34. More than three times.

35. Disturbance of mood present. Depressed, manic, hypomanic, suspicious, irritable, perplexed, suicidal feelings or intentions.

36. Disturbance of thought present. Schizophrenic type of thought disorder, impairment of intellectual functions - organic or psychogenic, dysmnesia - organic or psychogenic, primary delusions, delusions of guilt, passivity feelings, ideas of reference, nihilistic ideas, persecutory delusions.

37. Hallucinations of any sensory modality - present.

38. Difficulty in falling asleep or staying asleep as distinct from "early waking".

Social Class

39. I and II

40. III

41. IV

42. V

Neurotic symptomatology.

43. Phobias

44. Obsessions

45. Anxiety

46. Tension

47. Hysterical conversions

48. Somatic

49. Presence of a "syndrome"

Secondary diagnosis:

50. Schizophreniform illness.

51. Affective psychosis.

52. Neurotic affective disorder

53. Organic brain syndrome

54. Personality disorder

Family history positive for child:

98. Psychotic

97. Neurotic

96. Behavioural maladjustment

95. Childless though married

94. Hypertensive

Author's diagnosis:

93. The schizophrenia and toxic psychoses.

92. Severe affective disorder.

91. Organic brain syndrome.

90. Personality disorder.

89. Psychoneurosis.

88. Moderate or mild affective disorder.

87. Psychosomatic disorder.

84. Controls from R.S.2 and R.S.3.

83. N.I.P. Sample.

82. S.S.2.

81. R.S.2 and R.S.3.

55. Takes pills regularly.

56. Does not attend a club regularly.

57. Does not take an annual holiday away from home.

58. Has unsatisfactory neighbours.

59. Does not take regular exercise.

60. Is unsatisfied with retirement.

61. In second or subsequent marriage.

62. Sex lifd unsatisfactory.

63. Not satisfied with children and/or children-in-law.

64. Declining work record.

65. Both spouses working.

66. Not self employed.

67. Job non-pensionable.

68. Working life unsatisfactory.

69. Dissatisfied with medical care.

APPENDIX 10.

BOOKLET FOR PHASE II.

FAMILY HISTORY

SIBLINGS

EARLY LIFE

PERSONALITY

OCCUPATIONS

MARITAL

MEDICAL ILLNESS

PAST PSYCHIATRIC ILLNESS

HISTORY OF PRESENT ILLNESS

MENTAL STATE

Do you take pills regularly?

Do you smoke more than 20 per day?

Do you attend a club regularly?

How many home changes?

An annual holiday away from home

Have you unsatisfactory neighbours?

Do you take regular exercise?

Unsatisfied with your retirement?

Present civil status

Unmarried Married Separated Divorced Widowed Cohabiting

What age at marriage?

How many children?

Sex life unsatisfactory

How many children seen weekly?

How many in house upset and in what way?

Are you satisfied with your children and children-in-law?

What was last job before retiring?

Social class

How many jobs since 45?

Declining work record

Are both spouses working?

Were you self employed?

What age on retirement?

Was your job non pensionable?

Was working life satisfactory?

How many visits to G.P. surgery - reported

actual

How many specialists consultations since 45?

How many hospitalizations since 45?

How many operations since 45?

How many illnesses more than 1/12 since 45?

How many dental appointments in the past year?

Are you dissatisfied with medical care?

MEMORY FOR GENERAL EVENTS.

Score	Question	Verbatim Answer.
	Has anything important happened in the world recently? (score 1 point for important event, making allowance for patient's educational background).	
	Who is on the throne? When did the King before her die? (2 points for correct year; 1 point for estimate correct within 2 years).	
	What is the name of the present Prime Minister?	
	Who was Prime Minister before him?	
	What is the name of the President of the U.S.A.?	
	Who was the President before him? When was the last war started-finished? (2 points for both years; 1 point for one year correct).	
	Nature of a recent strike, and when it was? (If no response, ask for last big accident). (2 points if <u>both</u> reasonably correct)	

<u>Total Score</u>

MAXIMUM SCORE 12.

APPENDIX 11.

Coefficient of Correlation of C.M.I. (M-R) Scores and M.P.I. (N) Scores.

$N = 28$

Σ C.M.I. = 250 (u)

Σ M.P.I. = 689 (v)

$\Sigma uv = 7645$

$\Sigma u^2 = 4112$

$\Sigma v^2 = 20167$

$\sigma u = 8.19$

$\sigma v = 11.52$

$r = .5651$

$P < 0.01$

APPENDIX 12.

RANDOM SAMPLE 2.

APPENDIX 12

SEX	INITIALS	AGE	TOTAL	CORNELL A-L	CORNELL M-R	M.P.I. N	SYMPTOM PRESENTATION BY AGE 0-12	13-17	18-44	45-59	60+	PERSONALITY DEVIANT	SYMPTOMS CURRENT	PSYCHOSOMATIC HISTORY POSITIVE	AUTHOR'S DIAGNOSIS
M.	F.B.	62	28	16	12	12	-	-	-	-	+	-	+	-	Affective
F.	M.C.	64	60	42	18	26	+	+	-	-	+	+	+	-	Personality and Affective
F.	M.K.	67	12	12	0	18	-	-	-	-	+	+	+	-	Affective
F.	D.S.	60	51	41	10	34	+	-	-	-	-	+	-	+	Psychosomatic and Personality
M.	J.Q.	70	35	33	2	32	-	-	-	-	-	-	-	+	Psychosomatic
F.	T.N.	68	7	6	1	14	-	-	-	-	-	-	-	-	
M.	D.S.	61	12	11	1	2	-	-	-	-	-	-	-	-	
M.	P.B.	63	2	2	0	6	-	-	-	-	-	+	-	-	Personality
M.	J.R.	70	30	23	7	32	-	-	-	-	-	+	-	+	Personality
M.	J.T.	79	26	17	9	34	-	-	-	-	-	-	-	-	
F.	E.D.	72	26	24	2	32	-	-	-	-	-	-	-	-	
M.	E.E.	65	14	13	1	28	-	-	+	+	-	-	-	-	Affective
F.	E.H.	62	21	20	1	22	-	-	-	-	-	+	-	-	Personality
F.	E.S.	73	24	17	7	26	-	-	-	-	-	-	-	+	Psychosomatic
M.	D.N.	64	15	13	2	6	+	+	+	+		+	-	+	Personality

APPENDIX 13.

RANDOM SAMPLE 3

SEX	INITIALS	AGE	TOTAL	CORNELL A-L	CORNELL M-R	SYMPTOM PRESENTATION BY AGE 0-12	13-17	18-44	45-59	60+	PERSONALITY DEVIANT	SYMPTOMS CURRENT	PSYCHOSOMATIC HISTORY POSITIVE	AUTHOR'S DIAGNOSIS
M	A.B.	61	33	26	7	-	-	-	+	+	-	+	+	Affective
M	J.W.H.	67	18	18	0	-	-	-	-	+	-	+	-	Affective
F	I.C.	63	27	16	11	-	-	+	-	+	+	+	-	Personality Psychoneurosis
F	A.E.	63	21	15	6	+	-	+	+	+	+	+	-	Personality Affective
M	J.F.G.	60	31	22	9	-	-	-	Paranoid		+	+	+	Paraphrenia
M	J.P.	75	99	56	43	+	+	-	-	+	+	+	+	Personality Affective
M	L.O.	73	37	26	11	-	-	-	-	+	+	-	-	Personality Affective
F	A.C.	72	47	35	12	-	-	-	-	+	-	+	+	Psychosomatic Affective
F	A.N.	68	75	41	34	-	-	-	+	+	+	+	-	Personality
F	M.D.	81	32	17	15	-	-	-	-	+	+	+	-	Personality Affective
M	C.H.	71	36	25	11	+	+	+	+	-	-	-	-	Personality
F	L.W.	80	28	17	11	-	-	-	-	-	-	-	-	
M	J.R.E.	63	35	22	13	+	-	-	-	-	+	-	+	Psychoneurosis, Personality Psychosomatic
F	H.W.	77	23	13	10	-	-	-	-	-	+	-	-	Personality
M	A.R.	80	6	6	0	-	-	-	-	-	-	-	-	
M	A.N.T.	67	6	5	1	-	-	-	-	-	-	-	-	

APPENDIX 14.

SURGERY SAMPLE 2. APPENDIX 14.

SEX	INITIALS	AGE	TOTAL	CORNELL A-L	CORNELL M-R	M.P.I. N	SYMPTOM PRESENTATION BY AGE 0-12	13-17	18-44	45-59	60+	PERSONALITY DEVIANT	SYMPTOMS CURRENT	PSYCHOSOMATIC HISTORY POSITIVE	AUTHOR'S DIAGNOSIS
F	H.B.	72	16	6	10	24	-	-	-	-	+	-	+	-	Affective
F	C.D.	65	24	15	9	34	-	-	-	-	+	-	-	-	Affective
M	L.D.	64	8	8	0	9	-	-	-	+	-	-	-	-	Psychoneurosis
F	M.M.	75	83	59	24	34	+	-	+	-	+	+	+	-	Personality Affective
F	A.W.	65	34	17	17	20	-	-	+	+	+	+	+	-	Personality Affective
F	P.T.	84	51	32	19	30	-	-	-	-	+	+	+	+	Personality
M	T.O.	63	18	15	3	21	-	-	-	-	+	-	-	-	Psychoneurosis
M	W.M.	79	32	17	15	28	+	+	+	-	+	-	+	-	Personality Affective
M	E.M.	65	36	19	17	40	-	-	-	-	+	-	+	-	Affective
F	V.A.	65	39	22	17	40	-	-	-	+	+	+	+	-	Personality Affective
F	C.J.	62	5	5	0	17	-	-	-	-	+	+	-	-	Psychoneurotic
F	G.C.	65	35	18	17	26	+	+	+	+	+	+	+	-	Personality
F	E.S.	67	94	65	29	42	+	-	+	-	+	+	+	-	Personality

APPENDIX 15.

Case No. 1. Mrs. M.K. aet 67.

Her father died at 74 of pneumonia and her mother at 65 of haemorrhage from a peptic ulcer. The five siblings are all well. Her early life was unremarkable and after leaving school at 14 she spent three years at home then eight as a lady's companion. Her marriage to a builder was satisfactory although he became bankrupt during the war. Eight children are all well. Her interests were home centred and she kept constantly occupied with housework. When alone in the house she checked doors etc. but did not feel she was doing this to excess. Apart from an herniorrhaphy in 1960 she has had no illnesses.
Present illness: Three years ago the last child left the house and since then she suffered from insomnia, waking at 2 a.m. and being unable to fall asleep again. Her son and his wife came to stay with them in October '63 and since then she has felt depressed and easily fatigued. Her mental state in February '64 showed her apparently cheerful but preoccupied by worries over her son who had married a Chinese girl and who seemed to her to be drinking too heavily.
Formulation: Mild but long standing depression in a stable personality.
Diagnosis: Moderately severe affective illness.

Case No. 3. Mrs. E.S. aet 73.

Father died at 68 of a strangulated hernia. Mother died at 82. There were three older siblings all of whom died in old age. Her childhood was average and after leaving school at 14 she looked after the home until her marriage at 24. Her husband was a cashier and they had two children, one of whom died at birth. At 63 she had a hysterectomy after which she had a heart attack. At 70 she suffered from a gastric ulcer for one year and currently she suffers from thyrotoxicosis for which she is currently under treatment.
Formulation: Psychosomatic disease in a person of normal personality.
Diagnosis: Psychosomatic disease.

Case No. 4. Mrs. D.S. aet 60.

Father was a seaman and a father of the strict Victorian type. He drank his family into poverty and was violent towards his wife. There were five other siblings, one sister suffering from "a weak heart and nervous exhaustion". As a child Mrs. S. was nervous and shy. She did not mix with other children or join in their games. She lacked energy and suffered constantly from aches and pains. She stayed at school and met some trouble because she could not participate in games. As an adult she was unable to mix at all. She married happily at 26 and had one child. At 49 she had an arthroplasty to her right hip followed by an osteotomy at 54. At 59 she had a permanent tracheotomy for rheumatoid arthritis of the larynx. For the past 4 years she has suffered from D.U. symptoms but the condition is improven.

Formulation: Psychosomatic disorder in a woman who was timid and asocial throughout her life.

Diagnosis: Psychosomatic disease and personality disorder.

Case No. 6. Mrs. M.C. aet 64.

Her father was a heavy drinking policeman who used to beat his wife and children. She was brought up by a step-mother and never knew her mother. Her sister has been in a mental hospital since her father died at the age of 50. As a child she was afraid to go home and ran away at least once. She was a nail biter till adulthood and has always been afraid of the dark. After leaving school she did domestic service before and after her marriage at 20. She had ten children and to her regret she used to beat them severely. She smokes more than twenty cigarettes per day and is so timid that if she hears a noise upstairs she will wait in the road till her husband returns from work. For 14 years she has suffered from osteoarthritis of the hip.

Her last child left home two years ago and since then she has become more apathetic and asocial as the day progresses. She has also felt dissatisfied with the house she has lived in for 32 years, but has continued eating and sleeping well.

Formulation: Chronic depression in a timid personality, perhaps precipitated by the loss of her children from home.

Diagnosis: Moderately severe affective illness and a personality disorder.

Case No. 7. Mrs. E.H. aet 62.

Her father was killed in a road accident when she was eleven and her mother died of heart trouble when she was 14. Four siblings died at birth and one sister is alive and well. Her early life was uneventful, and she married at 30 interrupting her job as a clerk only temporarily. She did not want children because she was nervous and shy from goitre. For 18 years she has suffered from 'lower dorsal' osteoarthritis. She was an extremely reserved and shy person and lived a solitary life.
Formulation: Solitary personality.
Diagnosis: Personality disorder.

Case No. 8. Mr. J.Q. aet 70.

His father was an Irish labourer who drank heavily for periods of six months followed by six months abstinence. He died at 68 and his wife died at 70. There were seven children, none of whom became mentally ill. The subject's early life was normal and he worked as a Post Office worker and then as a regular soldier. He was discharged on a 60 per cent disability pension 4 years later following a gun shot wound in the right shoulder. He then did labouring jobs in various factories before becoming a park warden 14 years ago. He married successfully at 24 and had three children. He was a good mixer and a thorough worker. He smoked more than 20 cigarettes a day since adolescence. From the age of 43 till 58 he suffered from D.N. and for the past 14 years has suffered from chronic bronchitis. Although his D.N. was 'cured' by a herbalist he finds that he has had to remain on a strict diet.
Formulation: Psychosomatic disorder in a socially well adjusted man.
Diagnosis: Psychosomatic disease.

Case No. 9. Mr. R.B. aet 63.

Mother and father died in their sixties of unknown causes. There were two sisters both free of mental illness. Nothing outstanding happened in Mr. B's childhood and he worked as an Insurance clerk throughout his life. He married at 33 and as he was childless he adopted a son at eight months. This child showed disturbed behaviour in childhood and adolescence but has subsequently settled well. He had shingles at 29 and since he was 57 he has suffered from painful swellings of the joints in the summer. Although cheerful and good tempered he has always been a solitary man who feels bitter about the fact that his father suffered for years with some form of arthritis.
Formulation: Solitary personality.
Diagnosis: Personality disorder.

Case No. 10. Mr. D.W. aet 64.

Father was a masterbuilder and died when the subject was 3. Mother was 95 when she died 18 months ago. D.W. was the youngest of a family of four, none of whom displayed psychiatric symptoms. As a child his mother took him often to a homeopathic hospital, and he lost a lot of schooling as a result. When he left school at 14 he was successively a clerk for two years, a secretary for two years, an army clerk for four years, a bacon importer for two years, an accountant for 25 years, then a Company Secretary for 18 years till the present. He married at 24 and they had one daughter who intermittently refused to go to school till the age of 11. A kind thoughtful man, he was always reserved and unsociable. From adolescence he was obliged to check things repeatedly although he thought these actions silly. At the age of 22 he became so preoccupied by doubts about the accuracy of his addition of a column of figures that he took 10 days off work. Since the age of 40 his checking has become much less prominent till he now checks locked doors only once. In 1947 he had a perforated duodenal ulcer repaired, but still sticks to a diet to avoid indigestion. He presented no symptoms in January '64 and concerning his mental state he said he recognised that he felt 'freer' and was no longer subject to compulsions. There was no depressive thought content nor was there cognitive upset.
Formulation: An obsessional personality freed of his compulsions between the ages of 40 and 50.
Diagnosis: Personality disorder.

Case No. 12. Mr. E.E. aet 65.

Father died at 74 of cancer of the throat and the mother died at 66 of a stroke. There were eight siblings none of whom showed nervous symptoms. He did well at school, but left at 14. Then he worked his way up through the grain trade to become an inspector of shipping documents. However at 31 he became a school inquiry officer. He married at 25 but his wife has been a chronic invalid, following tuberculosis of the lungs, for the past 25 years. They had one daughter who is unmarried and lives with them. No independent information was obtainable regarding his personality as his wife refused to be interviewed. At 8 he was hospitalised for one month with diphtheria and at 62 he had a herniorrhaphy. For two years he has had varicose eczema of the left ankle. From age 44 - 47 he was depressed and felt suicidal and pessimistic. He spent 9 months in hospital and subsequently was impotent.
Formulation: A depressive illness followed by chronic impotence in an unhappy marital relationship.
Diagnosis: Moderately severe affective illness.

Case No. 15. Mr. J.R. aet 70.

Father was an alcoholic seaman and died at 46 of a perforated gastric ulcer. Mother died at 55 of t.b. of the lungs. There were frequent rows in the home, but no violence. There were five siblings. One boy was so 'nervy' that he could not court a girl, and one sister was retiring and friendless. He himself was free of neurotic traits in childhood and left school at 14 to work in a big house for two years. He then spent 4 years in the regular army before being pensioned off with a gun shot wound. He married at 26 but when his wife died at the age of 72 he remarried. He had no children. For the last 20 years he has suffered from indigestion caused by proven gastric ulcers. He was a hard working man, but shy and retiring with no friends. He always showed a tendancy to get depressed if he felt he was failing in a situation although there might be no possibility of success.
Formulation: Mild depressive mood swings in a solitary personality.
Diagnosis: Personality disorder.

Case No. 18. Mrs. F.R. aet 61.

Mother and father lived to old age although mother was a diabetic. There were four brothers and five other sisters. One of the brothers was given shock treatment with good results, for a mental illness in his 50s. After leaving school at 14, the subject did domestic work till her marriage at 24. She had one son and did part time office work after her marriage. She was always even tempered and sociable and the 'ideal housewife' according to her husband. At 32 she spent 18 months having tuberculosis of the sacro-iliac joint treated. For the last 5 years she has been on a fat free diet to prevent flatulence when she lies down at night.

Eighteen months ago she began to feel nervous, tense and irritable. She felt she did not care about her surroundings and was jumpy at sudden noises. She tired easily but had difficulty in falling asleep. Since she stopped working one year ago she had felt somewhat better, but she has to take Amytal once a day. She feels a recurrence of her symptoms. There was no cognitive upset.
Formulation: Neurasthenic symptoms occurring for the first time in a woman aged 60.
Diagnosis: Mild affective illness.

Case No. 22. Mrs. C.J. aet 62.

Her father was a shipping cargo superintendent and a hot tempered authoritarian man. For years before dying of a stroke at 69, her mother refused to leave the house unaccompanied. There were six sisters, all of whom are well. As a child she was 'suppressed' and when she left school at 14 to work as a secretary in an Insurance Company she was afraid to take independent action or to make conversation. She liked meeting people and had many friends in spite of the occasional temper outburst. She was always meticulous about detail but not obsessional. At the age of 25 she married happily, and subsequently had two children. The G.P. told her mother that she was a 'rheumaticy' child and she had to wear boots constantly. She had no other medical illness in her lifetime.

The present illness started in March '63 when two friends died of respiratory cancer. Shortly after the patient developed a feeling of pressure in the left breast. Apart from some difficulty in falling asleep there was no constitutional upset. After worrying for two months, she was reassured by her G.P., after which the symptoms gradually diminished and went. Her mental state six months later showed no abnormality.

Formulation: Mild hypochondriacal symptoms.
Diagnosis: Psychoneurosis.

Case No. 23. Mr. W.M. aet 79.

Father was a builder who died at 70 of cardiac failure. He was a hard man and would not allow the subject to be apprenticed as a carpenter. Mother also was over 70 when she died. There was one brother and one sister - both well. As a child Mr. M. was 'nervous' and had a succession of ailments. He stuttered till he was 30+ but got on averagely well at school. He had to do odd jobs to make money till he started carpentry at 27. During the war he was blown up and his left leg was paralysed until 2 years later when he had a fall at work. He married at 27 and they were happy although they had no children because he was determined 'not to inflict life on anyone'. His wife died 5 years ago. Throughout his life he liked meeting people and he had many ffiends. After his medical discharge from the army he was unable to walk along several roads for fear he was going to fall. He was tense, agitated and restless and suffered from insomnia.

For 6 months he has suffered from nameless fears and epigastric tension. He has had difficulty in falling asleep and staying asleep, but no upset in appetite. Also for 2 years he has experienced buzzing noises in his right ear.

Formulation: Anxiety symptoms associated with tinnitus in a man who suffered phobic illness in his earlier life and who was fearful as a child.
Diagnosis: Mild affective illness and personality disorder.

Case No. 27. Mr. T.O. aet 63.

Father died at 48 having been addicted to alcohol. In his late years he had been very suspicious of his wife's behaviour. Mother died at 42 having been crippled with rheumatoid arthritis. A sister suffered from major fits from birth until 14. She married an alcoholic. As a child, Mr. O. 'lived in a world of make believe'. He had an eye for beauty. After working in the ship building trade for 16 years, he was an insurance salesman for 10 years, a remand home teacher for 4 years and seedsman for 20 years. He did not marry until 36 because of the 'spectacle' of his mother and father. His wife was always frail and nervous and suffered from 'nervous depressions'. The sexual side of the marriage was 'staid'. He was an enthusiastic person - mens sana in corpore sana. He was a keen youth leader and still goes to night school.

Two and a half years ago he noticed himself becoming bad tempered and hyper-critical. This coincided with more severe depression in his wife. He blamed himself for her illness. His symptoms cleared one year ago. The only symptom present on examination of his mental state was glottis hystericus. He said that this troubled him intermittently and lasted for one week at a time.

Formulation: Behaviour change with hysterical symptoms.
Diagnosis: Psychoneurosis.

Case No. 29. Mrs. P.T. aet 84.

Father was a carpet planner who married twice and died of a stroke at 79. He was a nervous timid man. Mother died at 63 of diabetis with gangrene. There were three siblings, the two other sisters being 'nervous and timid'. Mrs. T. was free of neurotic traits in childhood and worked in a bakery till her marriage at 38. They had little S.I. and no children, he died at 53 of cancer of the throat. She herself was always 'very highly strung'. She was a good mixer and had several life long friends. She has suffered from rheumatoid arthritis for 15 years, and has also developed bilateral cataracts, one of which was removed two years ago. Since then she has been taking a 'nervous sedative'. If she stops taking this she becomes completely weak and has to take to bed. For sixteen years she has suffered from periodic depressions with apathy, anergy, and intolerance of noise. These symptoms last for half a day at a time but neither upset appetite or sleep.

Formulation: Hysterical symptoms with nervasthemia in a hysterical personality.
Diagnosis: Personality disorder.

Case No. 30. Mrs. G.C. aet 65.

Father died aged 68 cause unknown. He had had rheumatic fever as a child and all his life he complained of sharp pains in his chest and did little or no work. The mother made money by letting rooms and died aged 76 having been senile for three years. Of the two siblings, one sister has suffered from bad eyesight for 15 years and when she gets worried her 'eyes flare up'. The patient was a stutterer till 8 years old and 'nervy' at school. She stayed at home from 14 till 18 because of her nerves but then held down a secretarial job till her marriage at 26. Because of a difficult first labour she decided to have no more children. She was always energetic and the life and soul of the party, but her feelings were easily hurt and her friendships tended to be superficial. 5 years ago she fell and injured the bottom of her spine. She was not told the result of the x-ray, but she has been in constant pain since. At 18 she suddenly felt so weak that she could not walk about. She thinks she was unable to move her lower limbs at that time. One month later she was able to resume her job which she had started only 6 months before. When she was 58 her daughter left home to get married and the patient became so 'nervy' that she persuaded her husband to move house nearer the daughter.

Her present complaint is of 'dazzling' of the eyes. This has been present for 8 months and is relieved by Panadol. Examination of her mental state effected no other complaints nor was there evidence of depression or cognitive upset.

Formulation: Hypochondriacal symptoms in an inadequate personality.

Diagnosis: Personality disorder.

Case No. 32. Mrs. V.A. aet 65.

Both her mother and her father (a grocer) were kind people. She was third of a family of five and after leaving school at 14 she spent 9 years as a grocer's assistant. She was always slow to get to know people and was afraid of making a spectacle of herself. She had to check things like switches although she often thought herself silly for doing this. At 27 she married a civil servant who had a depressive illness at the age of 38. He died at the age of 62 and for 7 years she has lived with her son and his wife. When her husband was ill she experienced anorexia, anergy, and insomnia with early waking for four months. At 65 she had a hiatus hernia diagnosed radiologically.

Her present symptoms began just before Christmas 1962 when she developed attacks of 'giddiness', feeling weak and faint. She felt tense and she worried excessively about her hernia. She had difficulty in concentrating on certain things, and her housework seemed too much trouble. She 'felt

Case No. 32 contd.

as though she was becoming paralysed' on the left side from the waist upwards, involving her side, her shoulder and her lower jaw. By April 1963 she had developed depression with anorexia, early waking and inexplicable crying bouts. Her G.P. gave her Tofranil for 6 months, and by January, 1964 her only complaint was of occasional days of depression. Her mental state then showed no depressive thought content, neurotic preoccupation or cognitive upset.

Formulation: Depression and anxiety with hypochondriacal features in a mild obsessional personality.

Diagnosis: Mild affective illness and personality disorder.

Case No. 33. Mrs. E.S. aet 67.

The patient's father was a chargehand builder. Her mother was an invalid all her life with angina pectoris. Both parents were alcoholics. There were three brothers now out of touch with the patient. As a child she was 'nervous' and used to walk in the middle of the road to ward off harm. When she left school at 14 she worked in domestic service till her marriage at 25. She looked after her mother for the first 7 years of her marriage. Her husband was an invalid for 14 years till he died 9 years ago of respiratory tuberculosis. They rowed over each other's illnesses and sexual intercourse was never satisfactory. They were childless. Her feelings were always easily hurt. She was pessimistic and used to get long periods of depression (up to one month). In 1948 she suffered intractible intercostal neuralgia following herpes zoster and for this she was leucotomized in 1950. The neuralgia was not helped and she continued to feel almost constantly depressed, and also developed pain in her right ear when she coughed.

Her present complaints began in April 1963 with anorexia and excessive worry over the garden. There was pain all over her body especially in her jaws. For three months she has lacked confidence and found difficulty in getting the right words to say. She knows the first letter of the word, but has to wait for a few minutes before the whole word comes, and in addition her right hand 'just stops' after she writes a few words. There was no loss of appetite and for night sedation in January '64 she confesses to taking 15 gr. Sodium Amytal, but will not say for how long she has been taking this. Her mental state in January shows her to be querulous, garrulous and occasionally quite animated. There was no obvious depression in her demeanour or thought content. Her cognitive functions were unimpaired to clinical testing, in particular there was no sign of aphasia.

Formulation: Hysterical and hypochondriacal symptoms in a post-leucotomy state.

Diagnosis: Post leucotomy state in a personality disorder.

Case No. 34. Miss A.W. aet 65.

Father is alive and is aged 91. He had a nervous breakdown at work during the first world war. He has been cantankerous since his wife died at the age of 75. There was one other sister who is now married and has three sons. As a child the subject did not like meeting people, but encountered no trouble at school. She was never married. She did not suffer from mood swings, but there were times when she felt she did not want to mix with people at all. She was always a worrier. At the age of 42 she was given extra work to do at the office because of shortage of staff. She suddenly forgot completely how to do her job, and was off work for four months, and for the next 7 years she lost a lot of work because she felt she 'could not cope'.

For 18 months she has suffered with intermittent depressions lasting up to one month at a time. She feels she could, and is tempted to, gas herself. She feels easily exhausted and 'jumpy'. There has been difficulty in falling asleep and anorexia. At the time of interview she complained in addition, that she had had a continuous headache, unrelieved by analgesics for twelve days.

Formulation: Neurasthenic, depressive, and hysterical symptoms in a social personality.

Diagnosis: Personality disorder and affective illness.

Case No. 35. Miss M.M. aet 75.

Father died at 82 of cancer of the bowel. He was a chronic alcoholic. Mother died at 72 of Bright's disease. She was a nervous excessive worrier. The subject had two sisters both of whom were heavy drinkers and died of cirrhosis of the liver. Miss M. was a nervous shy child and sleep walker until her early teens. However, she enjoyed her schooling and then didvarious jobs in the hotel trade. She was ailing and weakly all her life, easily fatigued and never married. She had an hysterectomy at age 47 and following this was unable to work. During the first world war she got anxiety attacks indoors and attended an out-patient department for eight years.

For the last six months she had been feeling intermittently depressed. She was easily fatigued and started at sudden noises. She was vaguely fearful in a nameless way and her eating and sleeping were disturbed. During this time two of her friends died and at the time of examination she was unable to walk down the local high street because she kept imagining seeing her friend out shopping. If a symptom was mentioned to her it transpired that she suffered from it. Some of these symptoms her doctor understood and some he did not.

Formulation: Neurasthenic and hysterical symptoms in an hypochondriacal personality.

Diagnosis: Affective illness and personality disorder.

Case No. 36. Mrs. H.B. aet 72.

Father died at 78. He suffered from angina pectoris and had been depressed for the year preceding his death although he was not hospitalised. Mother died at 95, she was healthy and always happy. There were eleven children in all and no history of mental illness is known of in the family. Mrs. B. was a healthy child and she worked as a clerk until her marriage at 21. They had one sone who was killed in 1945 by a v. bomb. Her husband died four years ago of cancer of lung and kidney. She was a sociable person who was free of mood swings and was physically healthy all her life.

Since her husband died four years ago she has felt lonely and indecisive. There were intermittent feelings of depression and she suffered from early waking, but not from anorexia. Four months ago she moved into a maisonette from a terraced house. This house seems too small and perpetually untidy. She does not like her neighbours, and feels lonely although surrounded by people. She feels the house does not belong to her. Examination of her mental state showed no objective depression, but her performance on the cognitive test was surprisingly poor.

Formulation: Abnormal grief reaction still present and disturbing the patient's mental life.

Diagnosis: Mild affective disorder.

Case No. 37. Mr. L.D. aet 64.

Father and mother lived to old age and his three brothers were free of nervous symptoms. His own childhood was unremarkable and he worked as a railway clerk for 51 years. He married happily at 30 and by mutual agreement they had no children although S.I. was satisfactory. He was an easy going man with many friends. At the age of forty seven he had a six weeks' illness of pain in the back of his neck with weakness of arms and legs whenever he turned. Since then he had noticed that his heart occasionally misses a beat buthe does not have attacks of weakness. Examination confirmed his lack of symptoms.

Formulation: Hysterical illness at the age of 47 in an otherwise healthy life.

Diagnosis: Psychoneurosis.

Case No. 38. Mrs. C.D. aet 65.

Father was asthmatic and a very severe,man,he died at 67 and his wife at 85. There were four healthy brothers and a sister who was nervous and ailing all her life. The subject's childhood was unremarkable and she worked as a book folder until she married at 25. The marriage was happy and they had three children, the last of whom left home six years ago. She was free of mood swings and had a circle of long standing friends.

Three years ago they moved from a three bedroom terrace house into a flat. She felt that the ceilings were too low and that she was not getting enough air into the flat. She developed insomnia and anorexia. For the last six months she has been free of these symptoms and only needs to take an occasional sleeping tablet.

Formulation: Hysterical symptoms precipitated by a change of house at the age of 62.

Diagnosis: Mild affective disorder.

Case No. 40. Mr. E.M. aet 65.

Father, who died at 85, was a taxi-driver for 55 years. He was a very strict Victorian father. Mother died at the same age, also of old age. However, she was an easy going person. There were 15 siblings and no history of mental illness in the family. His childhood was healthy apart from an attack of rheumatic fever which left no sequelae. He was below average at school, left at 14, worked for 20 years as a valet and subsequently as a taxi-driver. He was always easy going and generous, and he felt the need of lots of friends.

He married at 22. His wife was neurasthenic. He therefore had to 'mother and father' his two sons. Two years before admission his wife was admitted to Guy's and died suddenly. Subsequently he had felt depressed and lacking in ambition, interest and drive. He felt easily fatigued and experienced difficulty in falling asleep with early waking. He blamed himself for his wife's death. In March of '64 he still became upset when speaking of his wife although there were no guilt feelings. There was no other depressive thought content and no cognitive upset.

Formulation: Abnormal grief reaction following an abnormal marital relationship.

Diagnosis: Moderately severe affective illness.

Case No. 70. Mr. A.B. aet 61.

The father, who died at 62 of cancer of the lung was a bus inspector. He was a strict irritable man and had a 'breakdown' at the age of 49 after seeing a child killed. Mother died at 65 of cardiac failure. She was prone to fainting fits when there was a row in the family, as there often was. The subject is the oldest of a family of 12. Six died in infancy and two of the surviving siblings suffer from gastric ulcers. Two maternal aunts developed paralysis at the age of 40. A.B. had to accept responsibility for the family while still in his teens. He suffered from biliousness and stomach pains 5 - 10 years plus urinary urgency without enuresis. He was above average at school, left at 14 and remained in the employment of a telegraph company till the age of 55. His marriage at 21 was satisfactory although he and his wife decided not to have children. In his personality he was energetic, driving, worrying and conscientious. He always prided himself on his accuracy which was essential in his work. He had an appendicectomy aet 38, a haemorrhoidectomy aet 54, and after a 10 year history a gastrectomy aet 48.
Present illness: Subsequent to the gastrectomy in 1950 he suffered intermittent tension, insomnia, anergy, anorexia and night sweats. In 1952 he was treated in the Maudsley Hospital for Neurotic Depression. He was treated by modified insulin and short term psychotherapy for 6 months, during which time his preoccupation with his symptoms diminished although they were still present on discharge. Examination in January '64 confirmed that his symptoms still troubled him and had done since his discharge. He had retired from the telegraph company at 55 for psychiatric reasons and found less exacting work as a clerk, an occupation in which he had lost no time through illness.
Formulation: A chronic anxiety state in a driving personality.
Diagnosis: Moderately severe affective illness.

Case No. 71. Mr. J.W.H. aet 67.

Father was a Post Office worker and died at 87 of old age. Mother suffered from angina and died at 59. There were two siblings. After an uneventful childhood the subject was apprenticed to a wool merchant for one year before joining the army. In 1916 he sustained a shrapnel wound in the right thigh and received a pension for two years. After the war he travelled in wool and cloth for 41 years before attaining his present position of Director of a woollen mill. He married at 26 and had three children. One boy died in infancy, but the two girls are alive and well. He divorced his wife for unfaithfulness after 25 years marriage.

Case No. 71 contd.

He did not suffer from mood swings and was a sociable man who had many long standing friends. Apart from jaundice at 17 he was free of illness throughout his life.
Present illness: Six months ago he began to experience epigastric 'discomfort' without pain and unrelated to meals. for 6 months when alone and unoccupied he gets 'butterflies in his tummy and feels tense'. There is no subjective depression. Thoughout he lacked energy but his sleep and appetite were not upset. Examination in January '64 showed a tremor of both hands, an objective impression of tension, but no depressive thought content save a vague feeling of guilt over the failure of his marriage. There were no psychoneurotic symptoms or signs of cognitive upset.
Formulation: Six months history of anxiety symptoms with mild guilt feelings in a stable personality.
Diagnosis: Mild affective illness.

Case No. 72. Mrs. I.C. aet 63.

Father died at 62 of chest disease. Although a heavy drinker he was not addicted and his drinking did not cause poverty in the family. Mother died at 75 of a stroke. She was a tense volatile woman who used to get 'worked up' over everything. Two brothers both died of accidents without showing nervous symptoms. The subject displayed no neurotic traits in childhood, although she was always worried about her examinations, and on one occasion was sent home in a 'frenzy'. She left school at 14 and worked as a buyer for a millinery shop for seven years although she used to worry a lot about her work. She married at 21 and after honeymoon cystitis S.I. was satisfactory. They had two daughters and they had a happy marriage. She had rheumatic fever at 17 without sequelae. She was an emotional and demonstrative person and was over dependent on her husband. After the birth of her second daughter she was depressed for three weeks. At the age of 62 after a fall she became shaky, tense and depressed, with a fear of getting on and off buses. She was hospitalised from then onwards, to date 18 months, with two intervals of two months outside hospital. She was treated with E.C.T. - 6, chlorpromazine, sodium amytal, valium, perphenazine, placebo and parstelin. On examination she had many hypochondriacal complaints which did not respond to reassurance. On questioning she said that when she got palpitations she became breathless. There was no cognitive upset.
Formulation: Chronic anxiety with phobic hypochondriacal and hysterical symptoms in an anxious personality.
Diagnosis: Psychoneurosis and personality disorder.

Case No. 73. Mrs. A.E. aet 63.

Father died aged 68 having given up work at 50, living on the income from two taxis. He was a great worrier and in early life had drunk excessively. Mother died of old age and was 'teetotal'. Two brothers led normal lives. As a child she was 'nervy' and fainted so often at school that she was sent to a convalescent home. She attended hospitals often with various complaints. After leaving school at 14 she did clerical work till she married at 23. Her husband owned a wholesale newspaper business. They had two children, both of whom are well. She was always a worrier and a spendthrift and visited her G.P. often with complaints which he said were symptomatic of emotional upsets. As a girl she had recurring tonsillitis. After an appendicectomy at the age of 66 she suffered from headaches for several months. While she was at work she had to attend her doctor several times with writer's cramp.

Present illness: Her late husband's business failed 3 years ago and subsequently she has felt tense and anxious. In August, 1963 she fell off a bus and chipped her right humerus. This was followed by an increase in tension with easy fatiguability. She required sedation for difficulty in falling asleep. There was no anorexia or irritability. Examination of her mental state confirmed that the symptoms were still present in February, 1964. No depressive thought content or cognitive upset was found.

Formulation: Current neurasthenic symptoms in a hypochondriacal personality.

Diagnosis: Mild affective illness and personality disorder.

Case No. 74. Mr. J.F.G. aet 60.

Father died at 70 after a prostatectomy. He was a strict puritan and had a masterful personality. Mother suffered from chronic rheumatoid arthritis and died at 70. The subject was an only child and at 20 he became a commercial traveller. He married at 34 but his wife died 7 years ago of Hodgkin's Disease. They had one son now aged 15. No independent evidence on this man's personality was available.

At the age of 40 he had an attack of pneumonia and was treated with M. & B. At some stage subsequently he began to feel that this had poisoned his system and for the past two years has been taking olive oil to clear this out. Two years ago he was treated at King's College Hospital for paranoid ideas of persecution and one year ago for endogenous depression. Mental state during the interview, he laughed explosively and sometimes inappropriately. When filling up the C.M.I., he made comments like 'that's odd', 'how that's queer'. He told the interviewer that the Minister of the Methodist Church and his congregation had turned against him when his wife died. He felt that people were all dropping hints about him, implying that he was a 'sex maniac'. He said that there was poison left in him from a boil in the neck and that this prevents him expressing himself.

Formulation: Paranoid delusions with ideas of reference and influence

Diagnosis: Paraphrenia.

Case No. 75. Mr. J.P. aet 75.

Father died at 55 when the subject was 13 months old. He worried greatly about his health and was very easily upset. Mother died at 68 of a stroke. She used to get very flustered and had to struggle hard to bring up her family of five. One sister worried a lot about her health and one brother, killed inthe war, was very nervy and upset. As a child Mr. P. was always afraid. He had a slight stammer until the age of 20 plus. He worked as a brewery office boy for 15 years and eventually as a tax office clerk. He married at 28 and had three children. A shy man, he was always liable to periods of depression lasting for 24 hours. He suffered from dermatitis at the ages of 33, 35 and 47. At 48 he had a mild myocardial infarction and at 71 a cholecystectomy. At 70 he was admitted to hospital feeling suicidal and totally lacking confidence in himself. When he was interviewed at the age of 75 he said that he was currently suffering from 'nerves'. He felt great shame at having been a psychiatric patient. He felt 'useless' and that his friends shunned him. His wife volunteered that he was worrying excessively about his health and that he would waken in the night worrying about his health after watching television.

Examination of his mental state confirmed his general pessimism and idea of worthlessness.

Formulation: Chronic depressive thought content with hypochondriasis in a fearful personality.

Diagnosis: Moderately severe affective disorder and personality disorder.

Case No. 76. Mr. L.O. aet 73.

Father died at 60 of an unknown cause. He was a heavy drinker and he was violent towards his wife. Mother, who died at 76, separated from her husband when the subject was 23. There were three other siblings, but no known history of mental illness in them. Mr. O. was free of neurotic traits in childhood and after doing odd jobs for a few years he became a box maker and worked at this until he retired at 66. He married at 32 and his wife died two months ago. They had no children and never questioned this. He always liked meeting people and had plenty of friends. Throughout his life he checked things although he knew this to be unnecessary. At the age of 67 he was admitted to B.R.H. for three months when his wife had a slight stroke. After the death of his wife two months before interview he was again admitted to hospital suffering from depression. When seen he was taking parnate and was symptom free, but his performance in the cognitive battery suggested early dementia. He was neither arteriosclerotic nor hypertensive.

Formulation: Depression with psychological upset in an obsessional personality, precipitated by a death.

Diagnosis: Severe depression and personality disorder.

Case No. 77. Mrs. A.C. aet 72.

Father died of old age and mother died at 60 of cancer of the stomach. Four sisters are all well. Her own childhood and schooling were unremarkable and she worked as a laundry worker before marriage, then as a charwoman. She married satisfactorily at 25 and had 3 children. She was a cheerful, sociable person, free of mood swings. At 58 she had gallstones removed and from the age of 60 she has been on a fat free diet because of indigestion. Six months before interview she developed some difficulty in breathing, and found she was having to inhale deeply to enable her to walk any distance. Three months ago she developed a lump in her throat which caused difficulty in swallowing. For a year she has suffered from insomnia, anorexia, and excessive fatiguability. Examination showed some pressure to talk of physical symptoms, she admitted to a cancer phobia. There was no cognitive upset.

Formulation: Phobic and hysterical symptoms in a woman suffering from ulcer symptoms.

Diagnosis: Moderately severe affective illness and psychosomatic disorder.

Case No. 78. Mrs. A.N. aet 68.

Father died at 77 of cancer of the bowel. He was an alcoholic and there was violence between him and his wife who felt she had married beneath her. She is alive, aged 90, and is said to have hated the subject since birth. The other sister has been 'delicate' all her life and suffers chronically from insomnia. Mrs. N., as a child, was not allowed to play with other children and never stood up for herself. She used to be afraid to go home from school. Before and after marriage she worked in domestic service and as a charwoman. She married first at 21, but left her husband after 10 years because he was 'too lazy to work'. She then lived for 20 yrs. with Mr. N. before she married him and he died fifteen years ago. She had one son by her first husband. Throughout her life she was timid and kept to herself. At 45 she had a chill in the kidneys and investigation for tachicardia, also an hysterectomy and infra red treatment for her legs. At 53 she developed attacks when she would go 'out for the count', these were accompanied by pain in the right hypochondrium and were cured by cholecystectomy at the age of 68. Since then she has had to have an operation for urethral stricture. At 49 she attended the O.P.D. of the Maudsley complaining of weakness and a 'feeling of drifting into something'. When interviewed she complained of trembling all over inside, perpetual malaise, a rock pushing down on her head, constant nameless fear, exhaustion brought on just by walking across the room and

Case No. 78 contd.

insomnia. Her mental state showed no delusional depressive thought content and it was noted that she completed the C.M.S. with obvious relish, bursting into hollow laughter when she was able to answer in the affirmative.

Formulation: Hypochondriacal symptoms in a fearful personality.
Diagnosis: Personality disorder.

Case No. 79. Mrs. M.D. aet 81.

Father died at 40 of pneumonia. He was hypochondriacal and constantly consulting a medical textbook. He was meticulous in everything he did. Mother died at 81. There were thirteen siblings and one of these was depressed for a year after her baby was born. The subject's childhood was spent with her grandmother and after schooling she worked in service until her retirement at 68. She married at 27 but he was killed in the First World War, three and a half years after their marriage. One daughter died in infancy and the twin boys, both suffered from ulcerative colitis, said to be caused by unsuccessful marriages. She was always a worrier and did not make any friends. At the age of 67 she began worrying a lot about a daughter-in-law who was staying with her and 'carrying on'. She became depressed and developed dermatitis of the trunk which required treatment for a year. Since then she has suffered from 'nerve pains'. These are fleeting pains felt anywhere in the body.
Formulation: Depression and hypochondriacal symptoms in a solitary personality.
Diagnosis: Moderately severe affective illness and personality disorder.

Case No. 80. Mr. C.H. aet 71.

Father was killed accidently at 72. He used the stick on his children and bullied his wife. Mother died at 73. There were seven children, two of them being stammerers. At school the subject was nervous and shy and he stammered from early childhood until recently. He worked in the confectionery trade all his life. He married satisfactorily at the age of 20 and had five children. In personality he was carefree with a small circle of long standing friends. He smoked more than twenty cigarettes a day, but he took alcohol only occasionally.
Medical History: 1914 trench fever; 1917 gas poisoning; 1918 shrapnell left thigh; 1920 appendix abscess; 1936 concussed for two weeks following motor accident; 1959 L.I.H. operation; 1963 prostatectomy. Currently in congestive cardiac failure due to mitral valve disease.
Formulation: Fearful personality
Diagnosis: Personality disorder.

Case No. 82. Mr. J.R.K. aet 63.

Father died in a motor accident when the subject was 7. Mother died at 45 in a mental hospital after a long stay there. Diagnosis is unknown. The subject was the last of a family of six. One brother died at 45 of a slow paralysis. The subject was brought up in a home and he was a bed wetter until he was 12. He worked all his life as a clerk in a glove factory. At 24 he married successfully and he had seven children. He was a sensitive, irritable man who had no close friends and did his best to remain apart from society. He had six major fits in his life and at 39 he had gastroenterostomy for a two year history of D.V. At 50 he had a nephrectomy.

Formulation: Neurotic trait in childhood followed by a psychosomatic disorder in adulthood in an asocial personality.

Diagnoses: Psychoneurosis, psychosomatic disorder, personality disorder.

Case No. 83. Mrs. H.W. aet 77.

Father died at 86 of a fractured femur. He ignored his children and drank very heavily with resulting rows in which he struck his wife. Mother died at 65 of cancer. She was a quiet woman who also ignored the subject. There were ten siblings none of whom have shown any known upset. Subject hated school because she had to wear a brace following a natellar removal. She worked as a bookbinder for 16 years until her marriage at 32. They had twins but they died in infancy and her husband died five years ago having suffered from stomach ulcers for years. The subject's own account of personality pictures her as undependable, asocial, liable to mood swings lasting up to one week, and indulging in fairly heavy drinking.

Formulation: Asocial, cyclothymic personality.

Diagnosis: Personality disorder.

Case No. 88. Mrs. E.H. aet 64.

Father died at 61 of cancer of the liver. He was a stern father but not a heavy drinker. Mother died at 92 of old age. The subject was last of a family of 14 and there is no history of nervous illness in the family. Her childhood and schooling were average and she made her career as clerk in the civil service. At 24 she married a travelling salesman who died two years ago of a 'coronary'. They had no children. She was an easy going, generous woman who had lots of friends. At the age of 19 she had an emergency operation on her fallopian tube. At 49 she began to suffer from rheumatoid arthritis and is still taking aspirin for this.

Formulation: Psychosomatic disorder in a stable life.

Diagnosis: Psychosomatic disorder.

Case No. 89. Mr. G.P. aet 63.

Father and mother died in old age and there were eight other siblings with no history of nervous symptoms. His childhood was normal and he worked steadily as a lense grinder. He married at 23. The marriage was happy but childless. He always was a calm placid man who was tolerant of his surroundings. At 21 he lost all his hair in his head and body for eight years. At 35 he had tuberculosis of the lung, which was treated. At 53 he lost the sight in one eye due to glaucoma. From 32 - 45 he suffered from indigestion and for the past 15 years he has suffered from varicose eczema of the right leg.

Formulation: Hysterical illness in early adult life followed by a psychosomatic disorder.

Diagnosis: Psychoneurosis and psychosomatic disorder.

Case No. 92. Mrs. .F.A.G. aet 63.

Father died at 72 in an air raid. Mother died at 66 of 'thrombosis'. Her four siblings were free of symptoms but she herself stammered until she left school. She did three unskilled jobs before marrying happily at 21. Her nine children and 21 grandchildren are all free of nervous illness. She was a friendly woman who was always laughing Apart from nephritis at 25 she was free of illness.

Formulation: Neurotic trait in childhood.

Diagnosis: Psychoneurosis

Case No. 93. Mr. P.M. aet 64.

Father died at 58 when an aneurysm of the aorta ruptured. Mother lived until she was 90 and three siblings are free of mental illness. His childhood and schooling were normal and after a spell in the merchant service, he settled down as a clerical officer in the civil service. He did not marry until he was 51 and his marriage was childless. He was a genial sociable man who had lots of friends. At 17 he had goitre cured by 'ray treatment'. In 1945 he suffered from nervous exhaustion and was given a disability pension.

Formulation: Traumatic neurosis in a well adapted life.

Diagnosis: Psychoneurosis.

Case No. 96. Mrs. C.R. aet 74.

Mother and father reached old age and her four siblings were free of nervous symptoms. As a child, until the age of 16 she used to faint a lot when under strain. She worked as a cashier until her first marriage at 25. She had four healthy children by that marriage and after her husband died of cancer of the bowel she married successfully at 50. Her second husband died 3 years ago. She is a sociable person, free of mood swings.

Formulation: Hysterical attacks in childhood.

Diagnosis: Psychoneurosis.

Case No. 97. Mrs. M.S. aet 77.

Father and mother led unremarkable lives and the subject was number five of eight mentally healthy siblings. Her birth and early development were normal, but she was a bed wetter until the age of 14. She worked as a shirt maker until her marriage at 23. Two children were reared without trouble but are mentally retarded. One child eventually had to be admitted to a mental hospital at the age of 38. Although she had many friends and liked to be sociable they entertained little at home because of their son's bad temper. Apart from gynaecological trouble she suffered only diabetes diagnosed at the age of 71.
Formulation: Neurotic trait in childhood.
Diagnosis: Psychoneurosis.

Case No. 98. Mrs. A.T. aet 77.

Mother and father died in old age. Mother is reported to have been very strict in rearing her seven children. one of the subject's brothers was feeble minded and has spent many years in a mental hospital. Her own childhood and schooling were normal and she worked in domestic service until her first marriage at 20. They had one daughter and after her husband had been drowned at sea she remarried at 32. She has a small close circle of friends although she does tend to be irritable. In the first world war she suffered from T.N.T. poisoning. At 62 she had a partial gastrectomy after a history of ulcer. She has had osteoarthritis in the wrists and knees for the last four years.
Formulation: A psychosomatic disorder in a stable life.
Diagnosis: Psychosomatic disease.

Case No. 100. Mrs. E.M. aet 60.

Father died in old age. Mother died at 66 of a liver complaint. Four brothers remained free of nervous symptoms. As a child she was very well behaved, and at boarding school from 14-16 she was very unhappy and sleep walked on several occasions. She did not work until she was 38 when she became the receptionist for an engineering firm. She married first at 22 and divorced her husband after 16 years. Her husband was very extravagant and unfaithful. There were two daughters by that marriage. The second marriage was at 45 and he turned out to be a dypsomaniac who had been married three times previously. She quickly separated from him. She was a woman of many interests and many long friendships (her own testimony)
Formulation: Hysterical symptoms in adolescence.
Diagnosis: Psychoneurosis.

Case No. 101. Mrs. L.W. aet 60.

Father was a policeman and her mother a diabetic, both of whom reached their eighties. There were ten siblings, but none showed nervous symptoms. She was a nervous child, afraid to go anywhere on her own and fearful when her mother left. She was free of these symptoms by sixteen and after doing a business course she became manageress of confectionery shops and later of an inn. She married at 26, but the marriage was childless and her husband died at 45 of respiratory tuberculosis. She was always a very sociable person but was on sleeping tablets for the last twelve years because of recurring nightmares. Her medical history was as follows: Aet 40 shingles, 41 blast injury to spine, aet 49 hysterectomy for fibroids.

Formulation: Neurotic traits inchildhood.

Diagnosis: Psychoneurosis.

I.P. Case No. 103. Mrs. C.H. aet 75.

Her parents died in County Cork and little is known of them or of the eight siblings. The patient was uneducated and worked in domestic service until she married at 30. They had one daughter and they were happy together. She was a hard working shy woman who had no interests outside the family.

After the death of her husband, four years previously, she became depressed and tearful. She refused to go out of doors and complained of pain in her abdomen and side. No physical cause was found for these complaints, although she was found to suffer from osteoarthritis and tuberculous adenitis. Her depression lifted spontaneously and she was transferred to another hospital for anti-tubercular treatment. During this time she suffered periods of intense depression when she would complain of various pains and aches. Shortly after she returned to Bethlem Royal Hospital she suffered a myocardial infarction and died one year after being first admitted. Post mortem confirmed the diagnosis of abdominal disease.

Formulation: Depression with hypochondriasis, precipitated by a death, in a woman suffering from organic disease.
Diagnosis: Affective disorder.

I.P. Case No. 104. Mrs. E.M.B. aet 66.

Father was psychopathic and a chronic alcoholic. He died at 60 and themother died at 80. There were eight children, two of whom have had 'nervous breakdowns'. Her childhood was unhappy and she dfd domestic service until she married a bus conductor at the age of 27. She disliked S.I. and had no children, but was fairly happy in her marriage. She was an excitable, energetic woman, who was subject to mood swings. At the age of 57 she developed acute anxiety with noises in the head. This followed an accident with a wireless set and for three months.

Six months before admission she underwent a cholecystectomy and became overactive for one month. She then became depressed and complained of head noises and inability to sleep. She made several suicidal gestures and was admitted. Observation showed that her mood fluctuated but she responded to six E.C.T. Follow up ten months later found her at ease although still suffering from occasional tinnitus.

Formulation: A cyclothymic personality breaking down after the age of 60 with depression, anxiety, and somatic complaints.
Diagnosis: Mild affective illness, personality disorder.

I.P. Case No. 105. Mr. T.W.C. aet 63.

Father died at 40 of Bright's disease. Mother died at 50, probably of tuberculosis. The patient came second in a family of five. Apart from rheumatic fever at 10, his childhood was uneventful. He then worked as a clerk all his life. He married at 24 and he was very happy with his wife and son. Although a quiet he took part in various organisations. He was a very heavy smoker (up to 70 a day). At the time of his marriage he had several attacks during which he became pale, lowered himself to the floor, did not speak for ten minutes, then carried on normally.

A year before admission he had one of his 'attacks' while his wife was ill away on holiday. Two weeks before admission, after being treated with M. & B. tablets for a fever and cough, he complained of lack of vitality which fluctuated from hour to hour. Three days before admission he attempted suicide with Drenamyl. He talked in a high pitched monotone and had an 'attack' two days after admission. A pneumococcal aspiration pneumonia cleared with penicillin. After two weeks he was discharged symptom free.

Formulation: Hysterical symptoms cropping up at times of stress; on this occasion precipitated by a physical illness.

Diagnosis: Psychoneurosis.

I.P. Case No. 106. Mrs. L.E.J. aet 70.

Father was a building labourer who died at 72 of 'heart trouble'. He was a comical little man who had a habit of winking when he spoke. Mother died at 75 of 'kidney trouble'. She had a twitch in her right eye in old age. There were four siblings, none of whom suffered from nervous illnesses. Little is known of the patient's early life and she worked mainly as a packer and sorter in laundries, until the age of 67. Her husband, whom she married at 25, was killed 11 months after the marriage without ever seeing their son. She herself was a hard working, jolly person who was never ill.

Three years ago, after dental extractions, she began to blink a lot with both eyes. This became more severe until it was a social handicap. Investigation at the Royal Eye Hospital disclosed no local cause. She was found to be hypertensive. Psychotherapy caused improvement, and after a minor set back she was discharged to out-patient care, i.e. after three months in hospital. However, at follow-up, four months later, the patient was still blinking, although not socially handicapped.

Formulation: A tic developing for the first time at the age of 67.

Diagnosis: Psychoneurosis.

I.P. Case No. 107. Mrs. L.M.R. aet 60.

The patient was illegitimate. She never saw her father, but she had a good relationship with her stepfather. Her mother reached old age and all six half siblings were healthy. After leaving school she worked for three years until marrying at 17, and then worked from 45 until the present. She and her husband lived in separate rooms for ten years. Their seven children were healthy. She was a friendly sociable woman who had no serious illnesses until the current one.

For fourteen months she complained of clicking in the ear, developing into humming and a bad smell and sweet taste in the throat. She developed pains and aches all over her body and became bedridden with anergy and insomnia. Examination showed her to have slight rheumatoid arthritis and anosmia of the left nostril. She rejected reassurance. During her five weeks' stay she gave notice several times and attempted suicide by strangulation. After discharging herself she attended the follow-up clinic three months later still presenting numerous somatic complaints.
Formulation: Chronic hypochondriasis with tinnitus.
Diagnosis: Psychoneurosis.

I.P. Case No. 108. Mr. R.C.B. aet 60.

Mother and father lived to ripe old age. His three siblings were free of nervous symptoms. After a happy childhood he did clerical jobs until entering the civil service at the age of 40. He married at 25 and had one son.

He was promoted in the civil service at the age of 56 and he began to complain that people were beginning to take advantage of him and that travelling was too much for him. Six months before admission he complained of excessive fatigue and felt so tired that he spent the annual sports day chair ridden. He had difficulty in falling asleep. In his two months in hospital he improved steadily although on discharge he was displaying an intolerance of noise. At follow up six months later he was symptom free.
Formulation: Neurasthenic symptoms beginning at the age of 60.
Diagnosis: Affective disorder.

I.P. Case No. 109. Mrs. A.W. aet 67.

Father and mother died in their eighties and the other eleven siblings displayed no mental illness. Her early life was uneventful and she worked as a house maid, then a conductress, and subsequently as a part time Red Cross Nurse. At 26 she married a plate layer, their marriage was happy and they had two children. She was a worrying, house-proud, perfectionist. At 44 she was treated with radiotherapy to

I.P. Case No. 109 contd.

the uterus and at 63 she developed a right hemiparesis.

After successfully nursing a sister through a stroke the patient began to feel depressed, tense, and anxious. She became unable to sleep and was inefficient in her daily duties. This lasted for six weeks before she was admitted. She was found to be hypertensive, depressed and tense. She expressed suicidal ideas. She responded to 11 E.C.T. but when this was stopped she relapsed. She was discharged on Tofranil, but three months after discharge she attempted suicide and she was admitted to her local mental hospital.

Formulation: Chronic depression in a patient with somatic disease.

Diagnosis: Affective Illness.

I.P. Case No. 110. Mrs. G.D. aet 64.

Father died at 40 of pneumonia and mother at 64 of 'heart disease'. The patient is fourth of five siblings. As a child she stuttered when she was excited but she had no other complaints and did well at school. She worked as a domestic servant till her marriage at 25. The marriage was happy in spite of her frigidity and the death in infancy of her only child. She reared a sister's child. She was always worrying and had a bad temper. She was very strict, and she checked things and was very concerned over cleanliness.

Nine years ago, one year after the death of her husband, she collapsed. Her face was 'turned up to the left' and her speech 'peculiar'. She became depressed, agitated and physically emaciated. She went numb and weak for seven days. Although the hand recovered she became tense and anxious and complained that everything seemed dark and grey in colour. At the same time her speech became slurred. She then developed numerous somatic complaints, she refused to go out or to be left alone and she threatened suicide. She lost weight and had difficulty in falling asleep. Examination showed her to be hypertensive with slight dysarthria, and residual weakness of the right lower face and hand. Her mood varied quite dramatically. She was treated with Serpasil and in four weeks she was symptom free save for occasional slight tension. Cognitive tests showed no deficit but at follow-up three months later she was again complaining of her eyes, etc. and her speech was very much worse.

Formulation: An obsessional personality suffering from an arteriosclerotic dementing process which presented with depression, hypochondriasis and phobic symptoms.

Diagnosis: Organic brain syndrome, personality disorder

I.P. Case No. 111. Mrs. L.B. aet 79.

Father died at 67. He was an engine driver and healthy throughout his life. Her mother died aged 62 by committing suicide on the railway line. The patient is seventh of eight children, two of her sisters killed themselves. After a normal childhood, she left school at 14 and worked in domestic service until her marriage at 23. She had three children, all of whom became neurotic. She was thrifty to the point of being mean, but was always ready to spend money on personal display. She was a vigorous, sociable, organising type of woman who displayed a rather possessive affection towards her children.

Six months before admission she became worried about the sale of her house. She then became preoccupied about the loss of physical and mental abilities and she lost sleep. Examination showed no specific memory disorder, but her E.E.G. was suggestive of a degenerative lesion. She was given Tofranil with improvement and after two months she was discharged and remained well on this drug at follow up six months later.

Formulation: Depressive personality change in a degenerative cerebral condition.

Diagnosis: Organic brain syndrome.

I.P. Case No. 112. Mr. W.G.K. aet 68.

Father died at 63 of pneumonia and mother at 33 in childbirth. Mother's personality is not well described, and of the patient's four siblings one was admitted to hospital suffering from visual hallucinations. As a child the patient was a sleep walker and subject to faints. He had approximately 20 jobs in his lifetime either labouring in engineering works, or working with machines. He married happily at 38 and had one son. He was always a sensitive person who was subject to depressive mood swings, during and after which he worried over trifles. He was discharged from the army during the Great War for 'nerves' and was treated as an in-patient at mental hospitals at the ages of 32, 37, 62 and 66 for depressions with obsessional symptoms. He would become preoccupied with the fear of feath and ruminate on how to avoid death. His current admission was precipitated by an exacerbation of those symptoms. No signs of depression or cognitive upset were found and he was discharged after six days. At follow-up one month later he was his old self.

Formulation: Life-long obsessional neurosis with disabling depressive episodes.

Diagnosis: Personality disorder.

I.P. Case No. 113. Mrs. A.M.R. aet 60.

Father was a heavy drinker and a strict disciplinarian. He lived to 74, whereas the mother, a 'nice' person, died in partial blindness at 64. The patient was fourth of seven siblings. Her childhood and schooling were normal and she worked at various counter-hand jobs till she was 59. She married at the age of 15 and soon left her husband who was an unreliable man. There was one daughter who is now happily married and has one son. There is no independent account of her personality, but her first illness occurred at 58 when she developed a weakness in both arms which cleared up suddenly after a few weeks.

One year before admission she developed weakness of both legs which gradually got worse. She said this spread upwards to involve her body and upper limbs. She lost interest in her surroundings and wished for death. Investigation showed to have subacute combined degeneration of the cord with a spastic paraparesis. Attempts to rehabilitate her met with limited success although it was felt that Tofranil and analgesics resulted in 'considerably less moaning and complaining'. She was discharged after three months in the hospital, but required readmission to the hospital in an agitated tearful state three months later.

Formulation: Subacute combined degeneration of the cord with hypochondriasis and depression.

Diagnosis: Moderately severe affective disorder.

I.P. Case No. 114. Mrs. A.M.E. aet 72.

Father was asthmatic and died at 62. Mother died at 65 after several years of inactivity and apathy. Patient is the third of eleven siblings, none of whom demonstrated psychiatric symptoms. She showed no neurotic traits in childhood, but was a very poor scholar. She did various domestic jobs before marrying a ticket collector at 22. The marriage was a success and they have five children. She was energetic, outgoing and free of physical ill health.

She 'never recovered' from her husband's death three years before admission. She appeared shocked and dazed and after a minor motor accident she began to complain of left sided abdominal pain. She became slovenly and insomniac and increased her previously moderate drinking to six pints of guinness daily. Six E.C.T. had no effect and she next had a partial gastrectomy for duodenal ulcer. This helped neither her abdominal pain nor her depression. She retired to bed and said she was afraid to go outside. She was given E.C.T. but after three threatments she became so confused and disorientated that treatment was discontinued. Three weeks later she appeared to make a spontaneous recovery and after a period of observation she was discharged. At follow up one month later she again presented many somatic complaints.

Formulation: Abnormal grief reaction developing into a mixed hypochondriacal and depressive picture in a woman suffering from duodenal ulcer.

I.P. Case No. 115. Mr. E.A.D.N. aet 60.

Father died at 83 having suffered for years from angina pectoris and duodenal ulcer symptoms. He had always been very apprehensive about his health. Mother died at 84. There was one younger brother. As a child, the patient saw little of his parents and was cared for by a nurse from the age of 3 till he was 8. He demonstrated food fads and nail biting. He was often locked in a small dark cupboard as a punishment. After working in an office for five years he entered theological college at 21 and was ordained four years later. Thereafter his clerical career progressed to his current chaplaincy, which he has held for six years. He married at 31 and had two children. He was a man of wide interests and although always anxious and preoccupied with his health and fears of collapsing, he made sustained efforts to be sociable. Since the age of 36 he had suffered from dyspepsia.

One year before admission he became anxious and would gasp for breath. One month later he had an attack of bronchitis and following this he was shaky and afraid of collapsing because of his palpitations. This lasted for 4 months when he had a sudden attack of occipital pain with transient numbness of the tongue. He could not be reassured that he had not had a stroke, in spite of numerous investigations. Two weeks later he had an attack of severe precordial pain which was diagnosed as myocardial infarction on the strength of minor E.C.G. changes. On admission he was found to have hypospadias. He was tense, sweating, and tremulous. He was afraid of being shut in, and of collapsing. His symptoms remitted over a month, with daily sedation and supporting psychotherapy. On discharge he still preferred company in the situations in which he had previously panicked.

Formulation: An anxious hypochondriacal personality developing incapacitating phobic, and possibly hysterical symptoms associated with a minor myocardial infarction

Diagnosis: Personality disorder.

I.P. Case No. 116. Mrs. V.H.G.B. aet 63.

Father died at 63 of D.U., whereas mother lived into the nineties. The patient was the youngest of eleven and none of the others presented psychiatric symptoms. Her childhood was uneventful and she worked as a shop assistant till she married a warehouse labourer when she was 18. She had three children and they were happy together. She was energetic and sociable, preferring men's company to women's. Between 19 and 21 she had 6 major fits. She was subject to chronic bronchitis after the age of 54 and in that year she was depressed for 4 months following the death of a sister.

Since she was 54 she was subject to 'nervous dyspepsia', attacks of diarrhoea, and intermittent pains in the neck, palpitations, and buzzing in the left ear. On admission at 55 years she was found to be hypertensive, but with rest

I.P. Case No. 116 contd.

she improved and was discharged after 4 months. The pattern recurred 3 years later but this time she was more obviously depressed - threatening suicide etc. She remained well till 6 months before her last admission when she began getting panic attacks, irritability, fears of going out or being left alone. Her mental state fluctuated from tearful self blame to cheerful optimism. In 4 months she had improved while on Nialamid but relapsed quickly and remained I.S.Q. until she responded 'miraculously' to Nardil. When this was stopped because of hypotensive symptoms she relapsed but improved on recommencing Nardil. She remained well 15 months later.
Formulation: Chronic depression with somatic symptomatology and phobias in a woman suffering from chronic bronchitis and hypertension.
Diagnosis: Moderately severe affective illness.

I.P. Case No. 117. Mrs. E.L.B. aet 62.

Father and mother lived till 67 and the patient was one of 14 siblings. Her early life was normal and her working life consisted mainly of office cleaning. She married successfully at 22 and had three children. She was a cheerful, garrulous, energetic woman, but from the ages of 33 to 46 she attend the Maudsley O.P.D. with fluctuating buzzing of the ears, associated with episodic weakness, depression, agitation and burning pain behind the ears.

Five years ago she witnessed the death of a relative and shortly afterwards developed tinnitus with a dragging pain over the back of the ears and the neck. There was depression which showed diurnal variation, her appetite was poor, and she became irritable and apathetic. She was admitted at the age of 62 and found to be of low normal I.Q. She did not respond to reassurance or to 12 E.C.T. She was readmitted unchanged a year later and leucotomised. This resulted in the disappearance of the patient's tension and distress. She still suffered from tinnitus but was able to carry on with her work, and follow up over the next three years showed that her apparently complete recovery had been maintained.
Formulation: Chronic depression with hypochondriasis in a patient suffering from tinnitus, relieved by leucotomy.
Diagnosis: Moderately severe affective illness.

I.P. Case No. 118. Mr. H.E.G. aet 68.

The patient's mother died of T.B. when he was a baby. His father died of carcinoma of the throat at 62. He was an only child and was reared by a maternal aunt who was cruel to him. Until he was 47 he was a seaman, subsequently he worked as a clerk. He married at 25 but had no children and had a turbulent married life. He was a jolly, sociable 'soft-hearted' person and was healthy throughout his life.

At the age of 56 he developed low back pain. This lasted one year and was succeeded by bouts of crying and anxiety. He complained of headaches for which no cause could be found. In the next three years he was admitted to hospital three times with those symptoms and it was felt that they resulted in his escaping from his wife. He then survived outside mental hospitals for nine years although he had an emergency gastrectomy following a perforation at the age of 67. Irritability and anorexia then led to his readmission. His symptoms varied while in hospital but responded to Tofranil until the time came for his discharge four months later. He remained well on placebos six months afterwards when followed-up.

Formulation: Hypochondriacal complaints used for secondary gain in a man free of symptoms till the age of 56.

Diagnosis: Psychoneurosis.

I.P. Case No. 119. Mrs. R.A.T. aet 73.

Father and mother were strict baptist parents and the patient was the third of five children, therebeing no mental illness in the family. She was free of neurotic traits in childhood and married successfully twice, having in all seven normal children. Throughout her life she was fussy about food and cleanliness but was sociable, cheerful and energetic.

Her illness started at the age of 72 when she became increasingly preoccupied with the thought that she might swallow any small object which was left beside her bed at night, e.g. a brooch, false teeth, etc. After 9 months she became depressed, tearful, anorexic and insomniac and had to be admitted. She was five days out in her estimation of the date, but her memory was otherwise intact and she was given a course of Tofranil with steady improvement. She was discharged well after two months. She was followed up carefully and it was apparent that she was having various obsessional doubts to cope with over the next 2½ years. She was then readmitted with similar symptoms coupled with a lack of interest in her surroundings. On this occasion she was found to have a deficit of memory for recent events which psychological testing showed to fall in the range of the organic brain damage group. Again she responded to Librium and was discharged after six weeks only to require prospective long stay admission one month later in a state of depression with agitation.

I.P. Case No. 119 contd.

Formulation: A slightly obsessional personality trait becomes florid at the age of 72 when it is coupled with, initially depression, and later with progressive memory impairment.
Diagnosis: Organic brain syndrome, personality disorder.

I.P. Case No. 120. Mr. R.F.H. aet 67.

The family history is vague because the patient refused to disclose details. As far as is known there was no mental illness in either the parents or the only sibling. His childhood was uneventful and after leaving school at 16 he became a reporter, initially in a local newspaper, and later on a national weekly. After 30 years of this he bought and ran his father's old newspaper. He married his first cousin and they had one son. The marriage was unsuccessful and his wife left him when he was aged 47. He described himself as brilliant but temperamental and liable to bouts of depression every 3 - 4 years, and these were accompanied by bouts of excessive drinking. He was unable to keep friends and formed very dependent relationships with women. He weighed over 16 stone and had possibly had two attacks of cerebral thrombosis at the ages of 62 and 65, (no sequelae). He had been treated for alcoholism at the age of 62 and had been addicted to barbiturates and chloral for 10 years before admission.

Following a brief episode of 'confusion', for eight months he felt frightened and tense and was reluctant to go out of doors. He was found to be depressed but no deficit of his cognitive powers was found. He took his discharge three days after admission and was not followed up.
Formulation: Anunstable personality with phobic features.
Diagnosis: Personality disorder.

I.P. Case No. 121. Mr. P.C. aet 71.

For three years the father was a victim of senile dementia before dying at 83. Mother died at 77 of pneumonia. He himself was third of nine siblings and as a child he was described as 'restless'. He worked as an engineer (mechanical) obtaining the position of Chief Engineer in the firm. His marriage was childless. He was a sociable, apparently cheerful man, who secretly worried about his health and found great difficulty in making decisions.

At the age of 51 he became depressed with hypochondriacal symptoms. For the next 20 years he complained of headaches and leg pains, and six months before admission he became depressed, insomniac and anorexic. By the time he was admitted his depression had lifted. His headaches and leg pains were

I.P. Case No. 121 contd.

still present on discharge six weeks later. On follow up six months later he was still complaining of somatic symptoms.
Formulation: Exacerbation of hypochondriacal personality trait with concomitant fluctuating depression.
Diagnosis: Personality disorder, affective illness.

I.P. Case No. 122 Mrs. A.D. aet 71.

Father and mother were stable personalities but father died relatively early in life of an unknown cause. There were two healthy siblings. The patient's early life was unremarkable and after doing domestic work she married at 19. The partners were compatible and they had two children, one of whom suffered from a 'nervous head' for 25 years. The husband died of T.B. and she remarried a Foreman labourer, again a successful marriage which produced one child. She herself was always anxious, timid, reserved and fussy. She was treated at the Maudsley O.P.D. from the age of 40 - 60 for chronic depression. Eventually she was admitted to a mental hospital but after her discharge she still complained of depression, pains in body, and fear of collapsing. She feared she had cancer of the rectum and took to her bed. On admission at the age of 63 she was found to be hypertensive and of low intelligence. She was given E.C.T. and became cheerful although still preoccupied with her aches and pains. She was discharged after four months and attended the O.P.D. for supportive psychotherapy every few weeks complaining of pains and generalised weakness. Eight years later she again took to her bed and required readmission in a debilitated condition. No evidence of organic disease was found and with conservative treatment she was well enough to leave hospital in four months. Over the next year she was intensively investigated in two general hospitals, the only positive findings being the effects of chronic overdosage with salicylates.
Formulation: A fearful personality at 40, phobic and hypochondriacal features at 60, and ultimately hysterical conversion symptoms at 63, the symptomatology being unabated at the age of 71.
Diagnosis: Personality disorder, moderately severe affective illness.

I.P. Case No. 123. Mrs. F.E.E. aet 63.

Father died at 42 of Bright's disease. Mother lived to 77 and worked as an office cleaner to support her family of four children. As a child, the patient was constantly afraid that her mother was going to die. She got on well at school but had to give up a job in a printer's office because she was afraid of the noise. Then she worked at lining fur coats till she married at 20. After marriage she worked as an office cleaner. The marriage was stable

I.P. Case No. 123 contd.

although forced by pregnancy. She had two children but virtually lost touch with her son. Throughout her life she lost time from work with various ill defined ailments. She was regarded as 'nervous' and was anxious and subject to frequent mood swings. She had few friends.

At the age of 47, following her menopause, she became increasingly anxious, irritable, and fearful of going out alone. She became subject to attacks of apathy and insomnia. By the age of 58 she was drinking two bottles of whisky per week and then she developed tingling and pain all over her body. E.C.T. did not help her and on admission at 63 she was found to have a senile tremor, hypertension and arteriosclerosis. There was no learning impairment and she was given antabuse then E.C.T. Her somatic complaints remained but she was discharged after four months. She did not return to alcoholism, but eighteen months later her blood pressure was rising and she feared an impending stroke. She was treated with various anti-depressant drugs over the next six months with little effect.

Formulation: A cyclothymic personality becoming chronically depressed post-menopausally with hypochondriacal symptomatology and hypertension.

Diagnosis: Personality disorder, moderately severe affective disorder.

I.P. Case No. 124. Mr. W.W. aet 62.

Father was asthmatic and died at 64. Mother left the father when patient was aged three and was not seen since then. There were three older siblings and no history of mental illness in the family save that the father drank excessively. He himself was free of neurotic traits in childhood and then pursued many jobs in his lifetime - mainly as a printing press hand. He married at 22 and after eight years he lost sexual interest in his wife. They had no children. He was a cheerful outgoing person but he drank heavily over a 20 year period and for 3 years he 'retired on a spree' and maintained himself by betting on horses. At the ages of 39, 46, 55 and 56 he suffered attacks of anxiety coupled with claustrophobia which lasted for approximately one month and kept him temporarily away from work.

One year before admission there was a recurrence of his fear of closed spaces, plus panic feeling, palpitations and breathlessness. For the last three months he was depressed, apathetic, anergic and insomniac. His drinking increased to half a bottle of whisky plus twelve beers per day. He was found to have an enlarged liver but no disturbance of consciousness, and with rest his fears gradually subsided. He was discharged after two months, but after he had failed to keep follow up appointments it was discovered that he had continued his heavy drinking up to fifteen months later.

Formulation: Recurrent anxiety state with phobic symptoms in a chronic alcoholic.

Diagnosis: Personality disorder, mild affective disorder.

I.P. Case No. 125. Mr. J.H.B. aet 60.

In spite of drinking excessively his father lived till 78. His mother died at 70. There were 11 siblings, two of whom suffered from depressions and one of whom was a criminal. The patient was enuretic till 9, and after various jobs he worked steadily in the railways, becoming a station foreman. At 48 he married successfully and had two children. He was always a shy man who made no friends and had very narrow interests. From 38 he suffered indigestion and had a gastrectomy at 50. After being bombed out at 45 he developed dermatitis.

He was ill for one year before being admitted. After being fired from his job, he began to have amnesic episodes, dyspepsia, and crying bouts. Barium meals were negative and on admission he was found to be hypertensive and depressed. His breathing was wheezy and he had various other somatic complaints. He improved somewhat after 7 E.C.T. but still presented somatic complaints 18 months later. He died suddenly one month later.

Formulation: Depression with hysterical and hypochondriacal symptomatology in a solitary personality.

Diagnosis: Personality disorder. Moderately severe affective illness.

I.P. Case No. 126. Mrs. F.M.S. aet 62.

Father and mother died of cardiovascular accidents. After the death of her son-in-law, her mother had for some months shown complete lack of interest in her surroundings She was an only child and exhibited no neurotic traits in childhood. She worked as a draper's assistant and latterly as a buyer. She married at 20 but her husband died of malaria after 3 years. There was one child. She was self confident and energetic. For several years her sight deteriorated and she had cataracts removed from her eyes in 1957.

She was well for two months after the removal of the first cataract but she then began to worry about ocular imbalance. After the second removal she became afraid to use her eyes in case she damaged them in sone way. She lost interest in her surroundings and became depressed. She developed headaches and insomnia. She was found to be hypertensive and depressed but was fit for discharge four months after an iridocyclitis had been treated. She was well at follow up three months later.

Formulation: Depression, phobia and somatic symptoms developing after bilateral cataract removal.

Diagnosis: Mild affective disorder.

I.P. Case No. 127. Mr. J.H. aet 61.

Father was a drunkard and died aged 59 of 'dropsy'. Mother lived to 79. One sister has led a stable life. He himself was a nail biter from childhood and he got occasional temper tantrums. He was considered bright at school but after the war he worked as a factory hand. He married at 33 but at the age of 49 he acquired a permanent mistress. There is one daughter. He was always anxious and highly strung but in spite of this he enjoyed group activities. For two years prior to admission he knew he had hypertension.

For nine months before he was admitted he complained of headaches, a creeping feeling up his spine, pains in the left forearm and across the heart. He feared he would die of angina like his mother. He presented as a self confident, dogmatic man who did not seem depressed after the first day in hospital. Indeed all his symptoms disappeared until he was faced with the threat of discharge two weeks later. His symptoms fluctuated in severity over the next 15 months until he eventually had to be admitted to a long stay mental hospital because he chased his wife with a carving knife in an agony of pain.

Formulation: A two year history of hypochondriasis with severe anxiety and histrionic behaviour.

Diagnosis: Psychoneurosis.

I.P. Case No. 128. Mr. E.W.T. aet 63.

Father drank excessively and died at 61 of cirrhosis of the liver. Mother was a hard-working woman and died at 61 of myocardial infarction. There were seven children and none of the others displayed nervous symptoms. The patient's childhood was unremarkable and he worked in the printing trade until he was demobilized after the war when he became a porter in a street marked. He married twice and had four healthy children. He was a happy family man who was always active. At 58 he lost his ability to work and his concentration was poor for approximately one month.

For 10 years following the extraction of teeth he complained of localized aching pain in the left upper alveolar margin. For 18 months he had been depressed and unable to concentrate. He wept if he attempted to speak, and he lost sleep. He had attacks of breathlessness lasting ½ - 1 hour and for 4 months in hospital. Over the next year he fluctuated from month to month but with gradual improvement until he was again able to hold down his job.

Formulation: Chronic dental causalgia exacerbated by depression, with the development of a hypochondriacal attitude towards the pain.

Diagnosis: Mild affective disorder.

I.P. Case No. 129. Mrs. F.T. aet 73.

Father and mother lived to a ripe old age and the other two children had satisfactory health. Her early life and schooling were unremarkable and she helped her mother at home till her marriage at 23. Her husband was an estate agent and they were happy for 18 years till he deserted her for another woman. Of the five children, two were aggressive and were deserted by their spouses. When her daughter was deserted four years previously she had an illness similar to the current one.

She was always difficult, demanding, and irritable and for two years before admission she was very suspicious of her family. Following the death of a son-in-law four months previously, she complained of headache, apathy, and anergy. She became dependent on her family and subject to bouts of crying. Initially she produced minor hypochondriacal complaints and these did not resolve with psychotherapy. She was unimproved after six months in hopsital and at follow-up two years later she had been admitted to a long stay mental hospital.

Formulation: Hypochondriasis with depression occurring in an aggressive personality.

Diagnosis: Moderately severe affective illness, personality disorder.

I.P. Case No. 130. Miss C.E.A.W. aet 67.

Father died at 76 of cancer of the liver and mother lived till 80. Her two sisters have been free of mental symptoms. She was educated at home by a governess and never worked thereafter. She was always cheerful and a good mixer, although described as 'nervy'. She suffered from congenital strabismus and spinal osteoarthritis and had had one attack of mucous colitis.

At the age of 63 she began to have numerous falls, concurrently experiencing increasing fear of falling. She got attacks of trembling and her sleep was disturbed by nightmares. On admission she was found to have complete transposition of the viscera plus hypertension and cardiomegaly. Although she became socially active in the ward, her condition had not improved when she was discharged six weeks later.

Formulation: Hysterical symptoms of late onset.

Diagnosis: Psychoneurosis.

I. P. Case No. 131 Miss M.S.A. aet 72.

Father died at 38 from peritonitis. Mother died at 78. She was a worrier and "nervy". There were two sisters; both well. As a child she was frightened of the dark and frightened of enclosed spaces. After leaving school at 16 she worked at clerking jobs until she retired at 60. Two engagements were broken off because she had to look after her mother. She was a cheerful, capable and sociable person. At 18 she had 'neuralgia' of the right side of the face.

In 1947 she had an operation for glaucoma. After changing house, she was depressed for six months before a suicidal attempt with sleeping pills led to her admission. Her symptoms remained static and she was discharged after a fortnight, but had to be readmitted after three months. In this time claustrophobia, agression, and suicide threats had been added to her symptoms. Eventually she took an overdose of asperin, and was admitted in a state of agitation after five E.C.Ts. She improved, but her main improvement coincided with friendly overtures by her relatives. She was discharged after 4 months, and 4 months later at follow up she remained well.

Formulation: Depressive symptoms lasting for one year and starting at 71.

Diagnosis: Mild affective disorder.

I.P. Case No. 132 Mr. C.R.aet 78.

Mother died in her 30s. of cancer, and father died at 50 of a heart attack. Three siblings all well. There is little information on his early life, but he worked at a foreman labourer in an auctioneer's all his life. He married happily at 36 and had 3 children. He was cheerful and sociable although inclined to be 'bronchitic'. At this age of 78 he had treatment for cancer of the prostate.

For 3 months he had been apathetic, weak, and having increasing difficulty in swallowing because of 'a lump in his throat'. In the week before admission he mentioned suicide several times. He worried excessively over defaecation and micturition. His voice was high pitched and slurred and he could not accept reassurance. He was found to have broncho-pneumonia, and in spite of treatment, he died 3 days after admission. Post mortem confirmed the broncho-pneumonia and showed no metastases from the prostate.

Formulation: Depression with hysterical symptoms reactive to the presence of cancer of the prostate.

Diagnosis: Mild affective disorder.

I.P. Case No. 133 Mrs. V.H. Aet. 72.

Father and mother died of old age and none of the patient's 8 siblings displayed any nervous symptoms. Her childhood and schooling were normal. She became a domestic servant until her marriage at 20. Her husband was a railway clerk, and they reared two sons without difficulty. She was an active, gregarious, independent woman, who was free of physical illnesses.

When she was 68, her husband died suddenly. She gradually developed involuntary tongue rolling and facial grimacing. Three weeks before admission she became agitated and frightened of falling ill while alone. Her ties became so pronounced that they caused social difficulties. When she was admitted she was found to be hypertensive, and no signs of depression were found. She was treated with abreactive techniques, and her ties were very much improved when she was discharged after two months.

Formulation: Hysterical symptomatology in an abnormal grief reaction.

Diagnosis: Moderately severe affective disorder.

I.P. Case No. 134 Mrs. B.M.C. aet. 63.

Mother and father lived to old age. They and the three children presented a united working class family. After a normal childhood, she did poorly at school, left at fourteen, and worked in the catering trade until eventually her own business crashed. Thereafter she worked in occasional charring jobs. She married at 21 and their only son has been subject to depressions. She herself was an anxious, suspicious woman and showed a tendency to become easily depressed. At the age of 15 she was ill for a year, insisting that she had done wrong and expressing fear of telling lies.

After her husband's death five years previously she grieved continuously. She avoided people, and was restless and insomniac. Two months before admission she developed herpes zoster and became increasingly depressed. She settled rapidly on largactil and with discussion of her social difficulties she improved and was discharged after six weeks. Follow up for one year showed that she suffered intermittant phases of depression.

Formulation: Abnormal grief reaction in a depressive personality.

Diagnosis: Moderately severe affective disorder; personality disorder.

I.P. Case No. 135 Mrs. E. J. R. aet 81.

Mother and father died in their eighties and she was the fifth of eleven. One sister was hospitalized for some years with a delusional illness. As a child the patient suffered from nightmares and on one occasion she sleep-walked. She worked as a waitress until her marriage at 22. The marriage was happy. There were four children, and all except one died in infancy. She was a self confident sociable woman.

Four months before admission, after an attack of 'flu, she became depressed, with fears of sleeping in the dark, of being alone, and of dying. These symptoms remitted after a month, but returned with greater severity two weeks later when she also developed suicidal thoughts. On admission she was found to be hypertensive, and was given superficial psychotherapy regarding her attitude to death and was discharged after six weeks. At the follow up one month later she was cheerful and symptom free.

Formulation: Post viral depression with phobic symptoms.
Diagnosis: Mild affective disorder.

I.P. Case No. 136 Miss M.C. aet. 67.

Father died at 49 of congestion of the spleen. Mother had a stroke and between then and her death 6 months later she tried to throw herself out of the window. The patient was the fifth girl of six children. Her mother died when she was eleven and her oldest sister looked after her. Until the age of two she was in splints to correct rickets. She then displayed sleep walking and temper tantrums. She was above average at school, but left at 14 to take up a life of various unskilled jobs. She was a member of various organizations but she was stubborn and quarrelsome and subject to mood swings. She never married.

Two years before admission she collapsed at work with palpitation and breathless attacks. Thereafter these symptoms continued and for 18 months she had in addition feelings of depression combined with insomnia. At times she felt she was going to die. In this time she was twice investigated in hospital but was unable to accept reassurance. Examination showed her to be hypertensive with partial left bundle branch block. She occasionally became breathless but this stopped if she was ignored. Arrangements were made for her to be kept in a small home and she left the hospital unchanged after six weeks. Follow up showed her well established and cheerful in the home, although she had had two 'heart attacks.'

Formulation: Hypochondriasis with subsequent mild depression in a personality subject to mood swings.
Diagnosis: Personality disorder, mild affective illnesses.

I.P. Case No. 137 Mr. A.S. aet 63.

Father and mother lived to a ripe old age. And the patient was the oldest of ten siblings, none of the others showing nervous symptoms. His childhood and schooling were normal and he then worked his way up the L.C.C. transport department to acting district superintendant. He married at 28 but although the marriage was successful they had no children. He was a prominent committee man but anxious and obsessional about his work.

Three years ago he started to have nocturnal panic attacks. Soon he got these on top of buses but never in the underground or other crowded places. Three months before admission, when coming out of hospital, he was nearly involved in a major accident. He then complained of odd feelings in the stomach, flashes up the side of his head, anorexia, insomnia and diurnal depressions. His arms and legs felt weak and he lost all his interests. He was in hospital for a fortnight during which time his depressions and obsessional personality were noted. After the first week he improved and on follow up ten months later he was working well although he remained an anxious man.

Formulation: Phobic and depressive symptoms first appearing at sixty in an obsessional personality.

Diagnosis: Mild affective illness, personality disorder.

I.P. Case No. 138 Mrs. L.M.J. aet 64.

The father was a heavy drinker but lived till the age of 68. Mother died early of D.Ts. There was one sister and she lived her life with the patient. After an unhappy childhood, she started a long series of domestic jobs at 15. She never kept a job more than a year. She never married. Throughout her life she was bossy and quick-tempered. Because of her suspicious nature she never made friends. At 58, she took an overdose of sleeping tablets and was treated with E.C.T. for depression.

Two months previously she began to think that people were talking about her and accusing her of starving her dog. She thought that neighbours were flashing lights through the wall, and that all their actions were being relayed to Buckingham Palace. Examination showed her to be depressed and in hospital her symptoms gradually cleared. Although she regained only partial retrospective insight she was discharged after two months.

Formulation: Depressive illness in a paranoid personality. The paranoid content here was really delusional misinterpretation.

Diagnosis: Moderately severe affective illness, personality disorder.

I.P. Case No. 139 Mrs. A.M.W. aet 75.

Father died of old age and mother died at 62 following an accident. Five sisters were normal and one brother was hysterical. He childhood was happy and she got on well at school after being a shop assistant. She went into domestic service and after her marriage at 28 she worked as a barmaid. She did not enjoy S.I. and she contrived a miscarriage as she did not want children.

She is described as being thoroughly difficult, and an awkward woman, who demanded her own way. At the age of 67 she suffered a depression lasting for two months. At 72 she lost her sense of taste and no organic cause for this could be found.

For one year before admission she had been depressed, apathetic, and careless following her failure to hold down her job as a barmaid. She also had developed psoriasis mainly of her hand, which made it impossible for her to get work. In hospital her problems were discussed with her in detail, in particular her inability to make friends. Her skin condition cleared completely during her two months stay and at follow up she remained well two years later.

Formulation: Depression and psoriasis developing when an asocial personality was forcibly retired.

Diagnosis: Mild affective illness, personality disorder.

I.P. Case No. 140 Mrs. E.R.M. aet. 64

Father died at seventy of bronchitis and mother died at 84 of old age. She was brought up in poverty and was a poor scholar. After leaving school she did various jobs in factories. At 21 she marrked a fish porter. They had three children. She was a happy go lucky woman who made few social contacts.

For five years the patient lived on medicine and pills; she had 35 specialist opinions in this time. She slept badly but ate well. On admission to hospital all drugs were withheld but she gradually became so symptom ridden that she could hardly do anything at all. She was then given 18 E.C.Ts. with no response. Thymoleptics had no effect. Leucotomy was suggested but she refused. She was in hospital for seven months, discharged for five months, then readmitted for leucotomy. Her mental state was as before; tension and agitation were more prominent and she sufferred from obsessional ruminations. Leucotomy was performed and she became symptom free. At follow up ten months later she and her husband felt that there was a return to normality although she was suffering from attacks of apparent clouding of consciousness which were attributed to hypertension. On follow up one year later all her symptoms had resolved.

Formulation: Hypochondriasis starting at the age of fifty-nine and cured by leucotomy.

Diagnosis: Psychoneurosis.

I.P. Case No. 141 Mrs. L.G.H. aet 69

Father was a heavy drinker and died of cirrhosis at 68. Mother died at 76 having had several neurotic depressive episodes. The patient was the oldest of eleven children, none of the others presenting nervous symptoms. She was free of neurotic traits in childhood, although she lost a lot of schooling helping her mother at home. She worked in various domestic jobs until she married at 30. Her husband was a merchant seaman and his heavy drinking caused friction. They had two symptom-free children. She always demonstrated depressive mood swings and was always fussy about her health. She used both these conditions to avoid unpleasant duties. At the age of 65 she had a tumour of the palate removed.

At 38, 44, 64 and 68 she suffered depressions severe enough to require treatment. The episode for which she was admitted had lasted for some four months and as usual was making her unable to cope with the housework. She was found to have early cataracts, neuro-dermatitis, and hypertension. There was no depressive thought content, she was just weary throughout her month's stay in hospital. She was pushed towards discharge. On return home she relapsed into her usual exhausted state and quickly found that she was helped by Benzedrine.

Formulation: Neurasthenic symptoms in a personality subject to mood swings.

Diagnosis: Mild affective disorder, personality disorder.

I.P. Case No. 142 Mr. A.E.S. aet 72

Father was an alcoholic and in a mental hospital for 11 years before his death. Mother lived till 92. The patient's twin and a younger sister died in infancy and his remaining brother suffered from gastric ulcers. He was average at school and thereafter worked in various shop keeping jobs. He married and had one daughter. He and his wife 'went their own way' while still living together. He lacked self confidence and was a selfish asocial man. In addition he drank excessively. In 1954 he suffered an attack of pleurisy and from 1955 to 58 from G.U. symptoms.

For two and half years he had felt unhappy and this had intensified since the loss of his job 7 months before admission. He had difficulty in falling asleep with early waking. He was found to have emphysema and asthma. His mental state showed slight depression with patchy memory loss. After six weeks on Largactil he became cheerful.

When this was withdrawn, he relapsed and was given 19 E.C.T.s. On discharge 5 months after admission he was still moderately anxious and he required a night sedative. Three years later he was investigated at the Brompton Hospital for the complaint of hoarseness of 3 years duration. He then became depressed with sleep disturbance, and complained bitterly about stomach pain which he said had been present for 3 years. This pain spread from his abdomen to the testis and to the front of his legs. On admission no definite evidence of learning impairment was found. He was lethargic and intermittently depressed. It became clear that he had a totally unsatisfactory relationship with his wife. But this could not be resolved. Tofranil seemed to help him but five months after admission he died following a bout of coughing. At post mortem was found bilateral bronchopneumonia on long standing pulmonary fibrosis.

Formulation: An abnormal personality who developed hypochondriasis and depression for the first time at the age of seventy.

Diagnosis: Moderately severe affective disorder, personality disorder.

I.P. Case No. 143 Mrs. E.G. aet 63

Her father was a tailor who died at 52 of a 'heart attack'. Her mother died at 68 of a stroke. The patient was the oldest of four siblings and in her childhood she was considered nervous. For one year in her teens she suffered from claustrophobia. After winning prizes at school she went to work at 15 in her father's business until her marriage at 25. Her marriage was fairly successful although she got little pleasure from S.I. She had three trouble-free children. She made acquantances easily and took an interest in various pursuits.

One year ago she suffered two blackouts. Thereafter worried about her heart and was not reassured by a cardiologist's opinion. Took to bed in case of further blackouts and began demanding that she should not be left alone, worried over trifles and slept poorly. E.C.G. showed her to have left bundle brunch block. The patient was slowly mobilized, secondary gain was thought to lie in the attraction of more of her husband's attention.

Formulation: Hysterical reaction to an organic illness.
Diagnosis: Psychoneurosis.

I.P. Case No. 144 Mr. E.A.H. aet 61

Father was a milkman and died at 75 of cancer of the lungs. Mother was nervous and prone to depression for many years; eventually dying at 79 after one year in Cane Hill Hospital. He was the second of six siblings. None of the others displayed nervous symptoms. His early life and schooling were unremarkable, and he worked mainly as a lorry driver. He married at 27 and had four children. He was a sociable, cheerful man but he estranged his wife by his 'selfishness' and heavy drinking. He had a gastrectomy for G.U. at 50.

For four years he had suffered from recurrent haemoptyses and in 1958 was admitted to hospital where a possible depression resolved spontaneously. 1961 he lost his job and required out-patient treatment for depression. In 1962 further haemoptysee caused his admission to hospital. When he discharged himself he was depressed, weeping, and lacking in interest. He was sleeping badly but eating fairly well. Admission was arranged some six months after the onset of this depression and physically no abnormality was detected. The day after admission he became symptom free, and he was discharged two days later. He had difficulty in finding work and attempts to treat him on an out-patient basis failed. He was therefore re-admitted after two months when he again cheered up quickly and insisted on being discharged.

However, he quickly relapsed and in four months required admission to a mental hospital.

Formulation:	Mild but chronic depressive symptoms in a slightly unstable personality.
Diagnosis:	Moderately severe affective illness, personality disorder.

I.P. Case No. 145 Mr. A.H.H. aet 60

Father died at 63. He was a machine shop manager and a heavy drinker. The patient's childhood was normal and he was an average scholar. He became a draughtsman and eventually a chief engineering draughtsman. He married at 35, and although they had no children they were very happy together. He spent all his leisure hours with his wife and is described as cheerful and stable. He was required to diet for three years for G.U. in 1955.

Since his wife's death eight months before admission the patient had been depressed and unable to fall asleep. His work had suffered and he agreed to admission. In hospital he improved gradually and was discharged after a month.

Formulation: An abnormal grief reaction in a solitary personality.

Diagnosis: Mild affective illness, personality disorder.

I.P. Case No.146 Mr. A.E.G. aet 74

Father died of cancer of the stomach and mother died of influenza. His brother suffered no nervous upsets. His own development was normal and he worked most of his life as a labourer. He married successfully at 21, but of the four children, two daughters suffered from depressive illnesses. Although his interests were home-centred the patient displayed no unhealthy personality traits.

One month after his wife died he became severely depressed with spasms of shouting, screaming and crying, coupled with lack of drive. Examination of his mental state uncovered suicidal thoughts but he improved after only a few days in hospital and discharged himself against advice. Follow up 3 months later showed him to suffer from intermittent bouts of misery.

Formulation: Abnormal grief reaction in an otherwise stable life.

Diagnosis: Mild affective disorder.

I.P. Case No. 147 Mr. W.O.B. aet 60

Father was a sailor and little is known of him. Mother had been a heavy drinker in early days and died at 55 of unknown causes. He was brought up in a home with two siblings, his brother was a 'roamer'. At school he learned the shoe-making trade and worked at this from 14 until 48 and subsequently did various factory jobs. He always was rather solitary and subject to mild mood swings.

For twenty years he had been subject to various aches and pains. Particularly stomach ache and aches in his legs. For these he took increasing doses of chlorodyne. Five months ago he became depressed and withdrawn with some difficulty in falling asleep and eventually was admitted to hospital after an accidental overdose. He was treated in hospital for four months with sod. Amytal. But he had to be re-admitted four months later unconscious from a further overdose. After two months conservative treatment he was transferred to a long stay hospital.

Formulation: Drug addiction with mood swings in an inadequate personality.

Diagnosis: Personality disorder.

I.P. Case No.148 Mr. A.L.B. aet 70

Father was a carpenter and died at 70. Mother died at 50 of Bright's Disease. The patient's four siblings led average lives. His early life was unremarkable and his working life was spent as a clerk. He never married. In personality he was rather timid, hypochondriacal and anxious, while being also cheerful and sociable. For many years he suffered angina of effort.

Three years ago he retired and since then felt mildly depressed. One week before admission he became anxious and suffered from insomnia and headaches. He improved rapidly on Nardil and Librium. But on discharge after six weeks he still required night sedation and suffered from occasional headaches.

Formulation: Mild but chronic depressive symptoms in a somewhat fearful personality.

Diagnosis: Moderately severe affective illness, personality disorder.

I.P. Case No. 149 Mr. A.H.W. aet 62

Father died at 77 and mother at 66. There were five siblings in all, two brothers being described as moody. Little is known of his early life, but after surviving the Great War he did various jobs until he retired on the grounds of ill health while serving in the post office as a cleaner. He married at 24. They were a happy couple and had four children. An easy going man, he mixed well with work mates and family. As a child he suffered from fits of which details are unknown. At forty-two he had a nephrectomy for tuberculosis and at 33 he was off work for one week with 'neurasthenia'.

Three years before admission he suffered a myocardial infarction, and nine months later began to suffer from headaches, dizziness, and depression. For some months he was afraid to go out alone. He was given small doses of sod. Amytal and gradually improved until he was discharged in two months to a job as a disabled person.

Formulation: Mild but chronic depression.
Diagnosis: Moderately severe depressive illness.

I.P. Case No. 150 Miss R.L. aet 60

Father died at 81 of cardiac infarction. Mother died at 79 of carcinoma of the stomach. There were three siblings none of whom showed psychiatric symptoms. The patient's early years were normal and after leaving school at 14 she joined the family dressing business and only left this two years ago. She had many friends and interests and was a successful business manager. From the age of 46 she suffered from alopecia totalis.

For 18 months she suffered from attacks of breathlessness starting with discomfort in the left side of her throat. She complained of head 'snaps', 'flutters', fears of stairs and of baths. She also complained of constant weakness of the limbs. Examination showed her to be anxious and depressed. She remained in hospital for five months trying to manipulate a stay of discharge. Her only remaining symptom was that of occasional over-breathing and at follow-up eight months later she was symptom free. Secondary gain was felt to lie in separation from her brother who was not on speaking terms with her.

Formulation: Hypochondriacal and hysterical symptoms arising after the age of 48.
Diagnosis: Psychoneurosis.

I.P. Case No. 151 Mr. A.M. de M. aet 67

His father was an asthmatic railway engineer and died at 50. His mother died of tuberculosis when the patient was ten. His sister is out of contact, living in India. His early development was normal and he was successful at school, qualifying as a doctor from Bombay Medical College. When he retired in 1947, he had reached the rank of colonel. His happy marriage at 31 resulted in three children. He was a quiet stable man and a practising R.C. Since 1950 he suffered from asthma and from 1953 had recurrent bronchitis and psoriasis.

In 1957 he fractured five ribs; the asthma became worse; he became increasingly depressed and unable to work effectively. After one month he was fit for discharge to part-time work. Follow up four months later found him again depressed and tremulous and in addition he showed impairment of memory. Five months later he had a cerebro-vascular accident leaving him with right sided weakness and difficulty in speaking.

Formulation: A chronic depressive illness precipitated by an accident preceding cerebro-vascular dementia.

Diagnosis: Organic brain syndrome.

I.P. Case No. 152 Mr. I.W.T. aet 65

Father died at 60 of valvular heart disease. Mother died 74 in a state of senility. She was 'nervous'. He had two siblings and two half siblings (maternal). One suffered from anxiety state with hypochondriasis. The patient was brought up by his mother and two sisters. After leaving school at 14 he worked at pig raising, initially with his father, and for the last 21 years in partnership. After his mother's death in 1932 he lived with his sister and her family. In character he was irritable, shy, lacking in self-confidence, and a worrier. He would worry about the least ache or pain, and would feel depressed.

For 3 years he had been moody and quiet and very tired after work. For a year he had complained of weakness in his legs. Six months previously he lay down throughout a party. For 3 months he had difficulty in sleeping, anorexia, and constant anxiety over his legs. After using a stick for pins and needles in his leg, he took to his bed complaining his legs would not carry him. Examination showed him to have calcification of the popliteal arteries and femoral veins. His mental state was free of depression and he showed patchy memory loss. Psychological testing gave no support to a diagnosis of organic impairment. While in hospital he

suffered no 'collapses' and he was discharged after two months, walking well. Three months later he suffered a period of agitation. But this subsided in 3 weeks time. However six months later the patient again took to his bed. This time denying concern over his legs but depressed and brooding over the death of his former partner. 10 days after this assessment he suffered a cerebral vascular accident and died. Post Morten disclosed a large portine haemorrhage with an old vascular lesion of small size in the left thalamus. There was also well marked cerebral atherosclerosis.

Formulation: An asocial hypochondriacal personality who developed an hysterical reaction to symptoms with a somatic cause - all in a setting of arterio-sclerosis which killed him four years after the onset of symptoms.

Diagnosis: Organic brain syndrome, personality disorder.

I.P. Case No. 153 Mrs. H.A.S. aet 76

Father died of diabetes and mother died of puerperal fever when the patient was 4. Little is known of her early life. But she seems to have had no major upsets, leaving school at 16. She then worked in a shoe factory until her marriage at 23. The marriage was successful, although her husband drank fairly heavily until his death in 1947 from cerebral haemorrhage. They had four children all of whom are well. She was an anxious, panicky woman, who was regarded as financially improvident. She drank alcohol episodically until the death of her husband, subsequently drank four guinesses daily with occasional shorts. She was a regular consumer of patent medicines, mild analgesics, and various laxatives.

For the eleven years since the death of her husband she had shown depressive mood variations. For two years she had complained increasingly of numerous bodily pains, some associated with fear of cancer. Three E.C.T.s had not helped her and she was admitted in January, 1959. She had a cataract in her left eye, she complained volubly and showed anxiety and tension, and moderate depression. She was thought unsuitable for in-patient treatment and was transferred to the day hospital. She did not respond to Tofranil or to a course of E.C.T. Efforts to incorporate her in local social clubs failed and she was discharged after 8 months. Follow up one month later revealed no change in her condition, and thereafter she failed to attend.

Formulation: Chronic depressive illness with developing hypochondriacal content in a woman of unstable hypochondriacal personality.

Diagnosis: Moderately severe affective illness, personality disorder.

I.P. Case No. 154 Mr. H.H. aet 71

Father and mother died in the seventies of old age. They had eight children and the patient was reared by a married sister from the age of 7. He was below average at school, lacked interest in anything, and left at 12. He worked as a street worker until admission. At 30 he married a widow of 44. He had to nurse her for 28 years as an arthritic cripple. A very independent man he was obsessionally clean in his personal habits.

His wife had died 18 months previously. He had never recovered from this. He suffered periods of depression and became progressively more apathetic after an attempted suicide by jumping in the Thames. He was noted to show evidence of recent loss of weight; he was retarded in speech and movement.

He felt that he would be turned out of his house and never able to earn his living again. He feared his piles might really be cancer. His I.Q. was high defective. He responded extremely well to resocialisation and was discharged after a month symptom free. Six months later he was discharged from follow up free from depression.

Formulation: An abnormal grief reaction in a man of low grade intelligence (which accounts for the dramatic symptom presentation).

Diagnosis: Mild affective illness.

I.P. Case No. 155 Mrs. D.E.P. aet 62

Father died aged 66 of a stroke. A heavy drinker, he beat his wife and children. Mother died at 42 of pneumonia, she also was a heavy drinker and beat her children. The patient was the 2nd of 7 children and there is no known upset among her siblings. There are no facts relating to her early years but after leaving school at 13 she worked as a maid until her marriage and then as a charlady or waitress. At twenty-three she married a childless widower, the marriage was unhappy because her husband was a heavy drinker and gambler. She was very sociable and belonged to many organised groups. She drank 3 pints of guiness daily and took aperients regularly. Since 1957 she had suffered from recurrent bronchitis and in 1955 she had a mild depression lasting for four weeks.

Since 1956 she had been on sedation following a fall. In 1957 she suffered from dyspepsia and nausea; these were worse in the mornings and occured in a setting of gloom, agitation and tension. In 1958 she was treated in St. Ebba's for five weeks with Largactil. On admission to B.R.H. in August, 1958 a fine tremor of the hands was noted. She was anxious and tense but not depressed. She complained of odd epigastric feelings and fear of traffic. She was given a course of E.C.T. with symptomatic improvement and was discharged after two weeks. However, eight months later at follow up she was again complaining of various odd symptoms.

Formulation: Chronic anxiety state with hypochondriasis in an extroverted personality.

Diagnosis: Moderately severe affective illness.

I.P. Case No. 156 Mrs. M.C. aet 64

Father died aged 67 of 'heart trouble'. Mother died at 30- 'tumor on the brain'. Patient is the penultimate child of 8. Her early life was unremarkable. She worked as a tailoress until her marriage at 23. From 1948 until 1954 she worked in a multiple store doing odd jobs. At 23 she married successfully and had one child. She was always a cheerful, active woman. Physical illnesses: 'heart attack' in St. Thomas' 8 weeks; subsequently attending St. Thomas' with osteo-arthritis in both knees. Radical mastectomy for Scirrhous carcinoma 1956. Operation on left knee in 1956.

Never really well since her 'heart attack'. After her mastectomy she developed a "terrible burning pain" spreading over her body. Two years took to her bed rising for one hour per day. She was irritable and upset by any noise. Anorexia and insomnia. Examination confirmed the medical

history, there were no signs of recurring carcinoma. She laughed as she described her agony in a monotonous voice. Feelings of depression precipitated by seeing people being active. The patient was treated with physiotherapy, Tofranil placebo, and latterly with Tofranil. After her discharge in two months, she continued to deteriorate and 18 months later had to be re-admitted to hospital.

Formulation: A chronic depressive illness superimposed on a 6 years history of hypochondriasis.

Diagnosis: Psychoneurosis, moderately severe affective illness.

I.P. Case No. 157 Mr. J.H.P.S. aet 64

Father was a carpenter and he, his wife, and six children led an unremarkable family life. The patient's early development and schooling were normal. He was a blacksmith until 20 years, a policeman until 45, and a taxi driver until the present. At 25 he married, but his wife died two years later following an operation. He remarried at 29, again successfully. There were no children. In his personality he was sociable, had many interests, and was energetic and stable in mood. During his life he suffered from malaria, scarlet fever, bomb injury and had a tonsillectomy and haemorrhoidectomy.

He was well until the death of his wife six months before admission, after which he became miserable, tearful, anergic, insomniac and anorexic. On admission aortic stenosis and incompetence was found, and in addition the lower pole of the right kidney was palpable. With discussion the patient became increasingly able to discuss his wife's death. His physical condition deteriorated and an I.V.P. was consistent with the diagnosis of hypernephroma. He had a right nephrectomy performed one month later and he made a good recovery. Six months later he was again at work. Once again became fed up, depressed at the thought of his wife's death, and expecting her to 'come back'.

Formulation: An abnormal grief reaction possibly prolonged by physical disease and debility.

Diagnosis: Moderately severe affective illness.

I.P. Case No. 158 Mrs. E.M.H. aet 76

Father died aged 45 of a heart attack following years of angina. Mother died of pneumonia aged 75. There were six other siblings. There was no other mental illness in the family. Her childhood was normal. She left school at 16 to work at machining until she married at 27. The marriage was successful but her husband died of tuberculosis in 1946. They had three children - all very sensitive and highly strung. The patient was very possessive towards them. She was always rather tense and nervous although she was dominating within her family. She always worried a great deal about her health. At 13 she had bilateral mastoidectomies. Throughout her adult life she was frequently troubled by headaches.

Since her son married 11 years ago she frequently attended her G.P. with varying complaints. Three years ago she began to complain of vibrations; especially when she was worried about anything. For some months before admission some

impairment of memory for recent events was noticed, and she had been losing weight. Examination showed her to have hypertension with clinical cardiomegaly. There was evidence of inactive rheumatoid arthritis. In her mental state she was mildly depressed, hypochondriacal, and self-pitying. Clinical testing revealed a poor grasp of general events and a patchy memory for recent personal events. Unfortunately the patient discharged herself before she could be adequately investigated. She was however seen 7 months later when she demonstrated memory loss, confusion, alexia, and incontinence of urine by day and night. She was disorientated and incoherent. The dramatic deterioration dated from an attack, one month previously.

Formulation: Hypochondriacal personality, becoming exaggerated from the age of 65, culminating in arterio-sclerotic dementia with further exacerbation of the hypochondriasis.

Diagnosis: Organic brain syndrome, personality disorder.

I.P. Case No. 159 Mrs. B.W. aet 64

Father and mother lived to a ripe old age and her 7 siblings were all healthy. Her childhood was free of neurotic traits and she worked as a laundress until her marriage at 21. Her marriage was successful, there being four children being reared without difficulties. She was a solitary person who was tidy and house-proud. She had no serious medical illness in her lifetime.

For 9 months she had been feeling miserable for no apparent reason. Tofranil from a G.P. brought some improvement but she relapsed with increasing agitation and frequent nightmares. She became afraid to go out or to be left alone.

Examination showed her to be mildly depressed, with sensorium intact. Unfortunately she discharged herself after four days. She was then followed up as an out-patient for one month, during which time her condition did not change.

Formulation: A depressive illness with phobic symptoms starting at the age of 63 in a woman free of mental ill-health.

Diagnosis: Mild affective disorder.

I.P. Case No. 160 Mrs. M.L.F. aet 62

Father was a bricklayer. A simple, quiet man but strict, he died at 69. Mother died at 45 when patient was 9. There were four siblings, of whom the third and fourth boys suffered from asthma. Her early history was normal apart from being a dunce at school. After leaving school at 14 she worked in domestic then waitressing jobs, until her marriage at 27. Her husband was blatantly unfaithful and two years ago she divorced him for adultery. They had two children. She was an independent, even-tempered woman whose interests were centred in the family. Physical illnesses: pernicious anaemia aged 44, aged 54 bowel operation initially involving colostomy, aged 59 sub-acute combined degeneration of the cord.

In 1960 felt very lonely and visited her daughter's home often. For two months before admission she felt depressed about the progressive weakness in her lege. She slept poorly and eventually took 60 gr. sod. Amytal. Before she fell asleep she told her daughter. Examination confirmed her sub-acute combined. She slept for 48 hours and then demonstrated a mood of hopeless despair. She was treated with vitamin B.12 and Tofranil. She improved gradually and was discharged after two months to live with her daughter.

Formulation: Depression and suicidal gesture coincidental with environmental stress.

Diagnosis: Moderately severe affective illness.

I.P. Case No. 161 Miss H.N. aet 69

Father was an architect and a lay preacher. He died at the age of 62 of pneumonia and is said to have been a moody man. Mother died aged 74 of a stroke. She was nervous. The patient is the youngest of 11 children and in her childhood she suffered from fears of the dark and food fads. She adjusted well at school and worked from the age of 16 years as a shop assistant in various jobs. Her periods started at 14 and she suffered from dysmenorrhoea and faints until the end of adolescence. She was always popular, cheerful, gregarious and confident. In 1920 she fell without hurting herself and subsequently felt that her ankles and knees were weak. In 1934 following a burglary 'nervousness' made her stay off work for six months. In 1951 her doctor advised her to retire because of headaches and nervousness.

In August, 1956 fell backwards to avoid a car, afterwards she could not go out alone. In 1957 she fell backwards when there was no traffic about. In 1960 there was increasing fear of falling and inability to go outside. On admission six months later, required support of walls and furniture, and when walking claimed that her legs became stiff. When the patella tendon of the left leg was tapped she developed a tremor. There was no sign of depression or cognitive upset. With re-educative measures her confidence increased to the point where she could do everything as long as she was accompanied and she was discharged after 3 months stay in hospital. It was felt that a dependent relationship with her living companion related to the secondary gain in this illness.

Formulation: Hysterical conversion symptom with phobic features developing at the age of 63 in a woman of previously good personality.

Diagnosis: Psychoneurosis.

I.P. Case No. 162 Mr. C.M.W. aet 63

Father died at the age of 65 of a throat infection. He had been a prosperous boot wholesaler and a very heavy drinker who was sometimes violent in the home. Mother was a rather strict woman who prayed a lot. There were two older siblings of whom the sister had a "nervous breakdown" (details unknown). The patient was worried in childhood by strange thoughts which kept recurring in his mind. He stayed at school till 17 then worked successively as a wireless trainee, a Naval Electrician, a 2nd class Air Mechanic R.N., and then a salesman. He then worked for 7 years as a clerk before spending 6 years living

on a legacy. Eventually at the age of 41 he became an accountant with the London County Council. Throughout his life he was excessively tidy, checking gas taps and lights etc.

The intrusive thoughts which started in childhood continued throughout his life but became more pressing one year before admission. This led to a slowing of his performance of any task and hence to unemployability. There was also early waking and anorexia with diurnal variation of his symptoms. Examination showed him to be slow, depressed and pre-occupied by fears that any thought or action might harm or kill other people. He realised this was absurd and had elaborated mental rituals to cope with these thoughts. He was treated with antidepressants and E.C.T. over a period of 20 months without change. On follow up seven months later he remained unchanged. At no time were there signs of an organic brain syndrome.

Formulation: Exacerbation of life-long obsessional personality traits - cause unknown.

Diagnosis: Personality disorder.

I.P. Case No. 163 Mrs. F.H.N.M. aet 63

Father died aged 36 when patient was aged 4; an alcoholic. Mother died aged 81; she remarried when the patient was aged 7. Stepfather died of T.B. when patient was aged 12. Siblings 5: one - Lilian aged 6 attended special school because she truanted. The patient showed no neurotic traits in childhood. Left school at the age of 14 having been an average scholar. She then worked for 3 years as a laundress, then for 3 years in an ammunitions factory. At twenty she married a bricklayer and the marriage was successful. They had six children all of whom are well. At the age of 37 she possibly had rheumatic fever and at 47 she had appendicitis with peritonitis.

Three years before admission she began to have periods of depression, she began to buy goods on hire purchase and to sell them at a loss using the proceeds to pay instalments due on other goods. She incurred debts of £1,200 and attempted suicide with gas one month before admission Apart from osteo-arthritis nothing was found, no evidence of cognitive deterioration was found. She was not sifnificantly depressed on admission, and demonstrated attitudes of a dominating attention-seeking kind.

Formulation: Depressive symptoms reactive to social circumstances in a woman of unstable personality.

Diagnosis: Moderately severe affective illness, personality disorder.

I.P. Case No. 164 Miss D.M.P.E. aet 72

Father was an office clerk who died in his sixty's. Mother died aged 64. She suffered from depressive mood swings, and was phobic for several years in her forties. The patient was fourth of 8 siblings, all of whom were free of mental illness. Her early life was normal. After leaving school at 14 she did a large number of jobs, and for the last 16 years had been a housekeeper companion. She never made friends easily because she felt socially inferior. At the ages of 34 and 55 she suffered from depressive illnesses lasting for several weeks.

Six months before admission she became excitable and insomniac. Two months later began to blame herself regarding a brother's and her mother's deaths. (The brother had died at the start of her illness). Swear words came into her mind and she became progressively more agitated. On admission she was found to be depressed, self-deprecatory, with ideas of

guilt. She was treated with Tofranil but became more agitated. After E.C.T. she was completely well and was discharged. However, two years later she developed a further attack which took exactly the same form, and she was admitted to a mental hospital for treatment then, and again six months later.

Formulation: A recurrent depressive illness initially thought to be reactive but later shown to be independent of environmental factors in an asocial personality.

Diagnosis: Affective disorder, personality disorder.

I.P. Case No. 165 Miss M.E.A.C. aet 61

Father died aged 69 of cirrhosis of the liver. He was a postman who did not drink and had a normal personality. Mother died aged 71: also a normal personality. The patient had two siblings; one sister and a cousin suffered from rheumatoid arthritis. The patient's early development was normal and she followed clerical occupations all her life. Since childhood she had difficulty in getting on with people because she was spiteful, pompous, and attention seeking. She was regarded as a born actress and constantly told fantastic stories inflating her own importance. At the age of 4 had an attack of rheumatic fever; knees tended to give way until aged 40. Aged 31 sinus operation; aged 52 radical mastectomy for carcinoma; aged 53 rheumatoid arthritis. At the age of 36 she was depressed for one year following the termination of a love affair.

1953: tense anxious fear of travelling on trains and buses. 1954: tense anxious, miserable. 1957: complained of rhythmic tremor of head with spontanious rotation to the left. This continued until admission. 1959: exacerbation of rheumatoid arthritis, apprehensive of future. 1960: afraid of going out alone, depressed and restless. Tofranil did not help. Afraid some catastrophy would afflict her. On admission the tremor and rheumatoid arthritis were noted. She minimised her difficulties and the evidence of depression was minimal. With no specific treatment she became symptom free, but displayed attention seeking traits and egocentricity. Secondary gain was thought to lie in her early retirement on medical grounds.

Formulation: Affective, phobic, anxiety, and hysterical symptoms, intermittently present throughout this histrionic woman's life, showing a quantitative increase since the age of 51.

Diagnosis: Personality disorder.

I.P. Case No. 166 Mrs. M.B. aet 60

Father died aged 70 of pneumonia. He was a "high principled disciplinarian". Mother died at 50 of pneumonia. She was undemonstrative, puritanical and strict. The patient was the youngest of six siblings. Her early life was unremarkable and she became an unqualified teacher at the age of 21. From the age of 22 she cohabited with Mr. B a journalist. He was an ill-tempered, egocentric man who never divorced his wife. He died following an operation in 1948. They had one child who qualified in medicine. The patient herself was widely read and multi-lingual.

Since the age of 20 she had been asthmatic. The attacks increased in frequency over the years and were associated with stress. Hypnosis had been attempted unsuccessfully. On admission she showed no depression and was found to be sensitive to house dust and mixed inhalants. She was treated by Finesinger psychotherapy directed mainly towards her possessive relationship with her son. She was discharged after three months and three months later was started on Prednisolone. Until her discharge four months later she had no further attacks.

Formulation: Asthmatic attacks in a woman showing an abnormal relationship to her son.

Diagnosis: Psychosomatic disorder.

I.P. Case No. 167 Mr. G.S.H.J. aet 65

His father was hypertensive and died aged 79 of a stroke. His mother died at 73 of cancer of the breast. He is the oldest of three siblings. He was a healthy child and above average at school. In the first world war he was a midshipman, and after being a P.O.W. in Germany for one year he transferred to the R.A.F., eventually retiring from the Service as a Group Captain at the age of 52. He then was a schoolteacher for 4 years before retiring. Married a widow with three children when he was 59. Throughout his life he had a slight stutter and feared that people might laugh at him. From 16-30 he suffered from migraines and at the age of 54 his migraines recommenced.

For 6 years he had complained that coupled with his migraines was a feeling of unbalance and of "a thunder cloud over his head". He found difficulty in concentrating and in sleeping. For two years he had complained of pins and needles in the left hand and around the mouth. These symptoms were getting worse prior to his admission in 1960. On admission his B.P. was 190/100 and he had fundal arterio-sclerosis. Psychological testing showed no cognitive upset. The E.E.G. appearances were those of cortical atrophy and this possibility was supported by the E.E.G. Thymoleptics and E.C.T. failed to help him and ten months after admission his symptoms were subjectively worse with no objective evidence of deterioration.

Formulation: A lifelong history of cerebro-vascular instability culminating in 6 years depersonalisation symptomatology with a hypochondriacal attitude, with some evidence of cerebral arterio-sclerosis.

Diagnosis: Organic brain syndrome.

I.P. Case No. 168 Mrs. H.G. aet 66

Neither mother nor father suffered from cerebral arterio-sclerosis and the only other case of mental illness in the family was the second of the patient's five siblings. This was a sister who was a patient in a mental hospital many years previously. The nature of her illness is unknown. The patient's early years were uneventful and after leaving school at 14 she did domestic work and factory work until the age of 48 when she retired after an accident. She married at 21, a merchant seaman, who was subsequently unfaithful thereby causing a divorce. She remarried at 40. Her second husband was a slaughterer and they were happily married till his death twelve years later. She then married

a tailor - again a successful marriage. She had four children, the first of whom had been an in-patient suffering from an anxiety state. She had been sociable and free from mood swings in her personality but on two previous occasions had been treated at home for "nervous breakdown". Following influenza six months prior to admission she had days when she was tearful without feeling depressed. Examination showed her to be hypertensive with grade II retinopathy. Her pupils were unequal but reactive. Her ankle jerks were absent and her vibration sense below the knees diminished. She showed easy fatigability and tearfulness. There was some impairment of memory for recent events. She was treated with a hypotensive drug and a discharge after two months, her only symptoms were a mild emotional lability with some dyspnoea unassociated with effort. She failed follow up appointments.

Formulation: Emotional lability coupled with mild hysterical symptomatology in a woman showing signs of arterio-sclerotic brain damage.

Diagnosis: Organic brain syndrome.

I.P. Case No. 169 Mr. B.B. aet 74

The father died aged 75 of Hodgkin's disease. The patient was the youngest of nine siblings none of whom showed mental illness. He was enuretic till 11 years. He won a scholarship and became a schoolteacher and eventually was promoted to headmaster of a secondary school. He married at 25 and had two children. A popular man, he was meticulous and punctual. At the age of 72 he had a prostatectomy for cancer, then a diverticulum of the bladder was removed and he had a urethral transplant.

Following the transplant he felt perpetually worried and tired. He lost interest in everything and began repeating the same words to himself again and again. He became dependent on his wife for every attention. His mental state showed an inability to go far from a lavatory for fear he might soil himself. He was put on Tofranil and Pethidine for bladder pain and was discharged after one month. A few days later he became comatose and died. Post Morten showed bilateral broncho-pneumonia.

Formulation: Neuraesthenic and phobic symptoms in a man with carcinoma of prostate.

Diagnosis: Moderately severe affective disorder.

I.P. Case No. 170 Mr. A.E.M. aet 60

Father died aged 79 of carcinoma of the stomach. Mother, a strict disciplinarian, died aged 83 of carcinoma of stomach. There were four siblings, one of whom died of cancer of the spine at the age of 60 having been asthmatic for 10 years. The patient was born in 1900 and after an unremarkable early life joined his father in his haulage business, working his way up to a directorship. He married at 32, a successful marriage, with two children. The elder child has rheumatoid arthritis. A hardworking perfectionist, his interests were business-centred.

At the age of 57 he became depressed and attempted to gas himself. His brother had died and he had had various arguments with another director. Six months later a cough which he had had for one year became increasingly more wheezy and it was noted that his shortness of breath was greatly aggravated by emotional upsets. When he was admitted to hospital later he was found to have no physical abnormality save a fine tremor of the out-stretched fingers. Mentally he was depressed and irritable with signs of tension. He was treated with Prednisolone, Chlorpromazine and anti-spasmodics. Supportive psychotherapy was also given and he was discharged after four weeks symptom free. Follow up

two months later showed that he had had no further attacks and was gaining weight.

Formulation: Asthmatic attacks in a man showing neurasthenic symptoms.

Diagnosis: Psychosomatic disorder, moderately severe affective disease.

I.P. Case No. 171 Mrs. C.K. aet 65

Father died age 75 of a stroke. Mother died when the patient was aged seven. She was an only child and was cared for by neighbours and relatives who lived nearby. She showed childhood neurotic traits and was an average scholar. Leaving school at 14 she worked in a factory till she married. Her husband died in 1956 of cardiac failure. The marriage was happy and they had 3 healthy children. She was a friendly, energetic woman with few interests outside her family. In 1946 she had a discharge from her ear treated by G.P.

Her husband died in 1956 and two months later she began to complain that the noises which had been present in her left ear since 1946 were becoming much worse. She complained incessantly and was operated upon in 1958, the result of which was a left facial palsy. She refused to take Tofranil prescribed in 1960 and became agitated, anorexic, and insomniac at that time. One week before her admission in 1960 she "collapsed" and stayed in bed subsequently. On admission she was agitated and importuning; she was depressed and expressed anxiety that she was "going mad" as a result of the noises. Phenothiazines helped her only slightly and she was discharged, but one year later she was essentially unchanged.

Formulation: Hypochondriacal pre-occupation with tinnitus with the eventual onset of chronic agitated depression.

Diagnosis: Psychoneurosis, moderately severe affective disorder.

I.P. Case No. 172 Mrs. E.M.K.B. aet 69

From the age of 62 until his death at 79 the father was in a mental hospital continuously suffering from depression. The mother died at 44 of T.B. The patient is the first of 8 siblings. Her early life was normal and she left school at 14 to work as a button-hole machinist until her marriage at 20. S.I. gave no pleasure throughout her life and her husband, a private bus proprietor, was regularly unfaithful until they separated 20 years later. They had five children. She was a cheerful energetic woman who was an active Jehovah's Witness. At 14 she had rheumatic fever; at 63 pleurisy: at 66 a "stroke" affecting speech and right arm, leg, and face from which she recovered.

For 10 years she had been complaining of "wind" without pain. For 4 years there had been epigastric discomfort variously described and not peptic in character. For 18 months she had been restless and fearful of going out and

washing in the sink. For months she had required night sedation. Examination disclosed mitral stenosis. She appeared slightly depressed but was able to laugh at suggestions of suicidal feelings. She was pre-occupied with thoughts of her abdominal discomfort. Tofranil diminished her restlessness and her depression and she was then transferred to the Brompton Hospital for mitral valvotomy. One month after her discharge from there her symptoms recurred requiring re-admission. E.C.T. produced only temporary relief. Follow up one year after her first admission found her unchanged.

Formulation: Chronic hypochondriasis of late onset exacerbated by depressive illness in a woman of good previous personality.

Diagnosis: Psychoneurosis, moderately severe affective disorder.

I.P. Case No. 173 Mr. J.C.D.N. aet 76

His father was a doctor in the Indian Civil Service, and was a drug addict in his later years. His mother died when he was a few weeks old and his father remarried when the patient was six years old. The stepmother was a difficult rejecting woman. He is the youngest of three children - one sister crippled by "arthritis". He had a severe stammer until his early twenties. Preparatory and Public School education till 18 years when he went into the tea business, eventually becoming a broker in India. He married successfully at the age of 47 and had two children of whom the younger was a persistent stammerer. He was a confident, sociable, energetic man who after his retirement increased his drinking to half a bottle of gin per day.

15 years before admission, i.e. shortly before his retirement he began to experience pain behind the ears. For the previous three years this had caused insomnia, and for one year his general and social interests had been restricted. He had also become pre-occupied with his bowel function. On admission it was found that in spite of reassurance he felt that there was some organic cause for his headache, and he seemed mildly depressed. A block of the occipital nerve by injection of local anaesthetic did not relieve his symptoms. Tofranil and Prochlorperazine produced no relief of symptoms. He was discharged unchanged.

Formulation: A hypochondriacal symptom present for 15 years and causing increasing incapacity in a man of healthy personality.

Diagnosis: Psychoneurosis.

I.P. Case No. 174 Mr. N.P. aet 78

Father was a schoolmaster who died in his early 80's. Mother was a severe asthmatic who died when the patient was 18 months old during the delivery of her fifth baby. The patient was adopted by an uncle and aunt and separated from his family. But he led a happy childhood free of upsets. He left school at 14 but via an apprenticeship scheme he qualified as a teacher when he was twenty, eventually retiring in 1946. He married at 48 and his wife died of breast cancer 10 years later. He was a solitary man, obstinate, independent, sensitive and irritable. Apart from malaria contracted during the first world war he was healthy. On New Year's Eve 1961 he had diarrhoea and vomiting. Subsequently he felt uncertain and insecure and 4 months later his fears of bowel cancer led to him being investigated as an in-patient. He became hopeless and bewildered and pre-occupied by alleged financial

difficulties. Examination showed him to have other depressive ideas. There was no impairment of his memory. He was treated with Tofranil and in two weeks he was symptom free. At follow up 3 months later he remained well.

Formulation: Hypochondriacal symptoms plus anxiety in an asocial personality.

Diagnosis: Moderately severe affective disorder, personality disorder.

I.P. Case No. 175 Mrs. M.I.W. aet 64

Father died aged fifty of cancer of pancreas: he suffered from asthma from childhood until about thirty. Mother died at 70 of 'thrombosis': selfish and over-restrictive towards the patient. Patient was the fifth child of a family of eight. The eldest sister died in a mental hospital in her 70's after a suicidal attempt. One brother was unable to settle down and left his wife and family, to wander all over the world. Two brothers suffered from hay fever and asthma. A maternal uncle committed suicide. The patient was a bed wetter until 16. She suffered from night terrors. She was an average scholar, but after looking after the family for two years she ran away from home, and began a nursing training. She married at 25 a captain in the Indian Army. He was perpetually in debt and eventually deserted her for another woman. They had two children. The boy drank heavily, but settled in his 30's. She herself was always a perfectionist with some obsessional traits. She had a mastectomy and for 13 years suffered from recurrent cystitis.

Two years after the birth of her son she began to suffer from asthma. For two and a half years prior to admission she had been on Cortisone. She was given Finesinger psychotherapy directed towards releasing her aggression towards the husband who had deserted her. On the day before discharge the vision in her left eye dimmed but recovered next day. On her discharge she had been in hospital for two months and was free of asthma.

Formulation: Psychogenic asthma with a transient hysterical conversion symptom in an obsessional personality.

Diagnosis: Psychosomatic disease, personality disorder.