Signs and symptoms of mental disorder

Psychiatry can be practiced only if the psychiatrist develops two distinct capacities. One is the capacity to collect clinical data objectively and accurately by history taking and examination of mental state, and to organize the data in a systematic and balanced way. The other is the capacity for intuitive understanding of each patient as an individual. When the psychiatrist exercises the first capacity, he draws on his clinical skills and knowledge of clinical phenomena; when he exercises the second capacity, he draws on his general understanding of human nature to gain insights into the feelings and behaviour of each individual patient, and into ways in which life experiences have affected that person's development.

Both capacities can be developed by accumulating experience of talking to patients, and by learning from the guidance and example of more experienced psychiatrists. From a textbook, however, it is inevitable that the reader can learn more about clinical skills than about intuitive understanding. In this book several chapters are concerned with aspects of clinical skills. This emphasis on clinical skills in no way implies that intuitive understanding is regarded as unimportant but simply that it cannot be learnt from reading a textbook.

The psychiatrist can acquire skill in examining patients only if he has a sound knowledge of how each symptom and sign is defined. Without such knowledge, he is liable to misclassify phenomena and make inaccurate diagnoses. For this reason, questions of definition are considered in this first chapter before history taking and the examination of the mental state are described in the second.

Once the psychiatrist has elicited a patient's symptoms and signs, he needs to decide how far these phenomena resemble or differ from those of other psychiatric patients. In other words, he must determine whether the clinical features form a syndrome, which is a group of symptoms and signs that identifies patients with common features. When he decides on the syndrome the psychiatrist combines observations of the patient's present state with information about the history of the disorder. The purpose of identifying a syndrome is to be able to plan treatment and predict the likely outcome by reference to accumulated knowledge about the causes, treatment, and outcome of the same syndrome in other patients.

Before individual phenomena are described, it is important to consider some general issues concerning the methods of studying symptoms and signs and the terms used to describe them.

Psychopathology

The study of abnormal states of mind is known as **psychopathology,** a term that denotes three distinct approaches.

The first approach, **phenomenological psychopathology (or phenomenology),** is concerned with the objective description of abnormal states of mind in a way that avoids, as far as possible, preconceived theories. It aims to elucidate the basic data of psychiatry by defining the essential qualities of morbid mental experiences and by understanding what the patient is experiencing. It is entirely concerned with conscious experiences and observable behaviour. According to Jaspers (1963), phenomenology is 'the preliminary work of representing, defining and classifying psychic phenomena as an independent activity'.

The second approach, **psychodynamic psychopathology,** originates in psychoanalytical investigations. Like phenomenological psychopathology, it starts with the patient's description of his mental experiences and the doctor's observations of his behaviour. However, unlike phenomenological psychopathology it goes beyond description and seeks to explain the causes of abnormal mental events, particularly by postulating unconscious mental processes. These differences can be illustrated by the two approaches to persecutory delusions.

Phenomenology describes them in detail and examines how they differ from normal beliefs and from other forms of abnormal thinking such as obsessions. On the other hand, the psychodynamic approach seeks to explain the occurrence of persecutory delusions, in terms of unconscious mechanisms such as repression and projection. In other words, it views them as evidence in the conscious mind of more important disorders in the unconscious.

In the third approach, often called **experimental psychopathology,** relationships between abnormal phenomena are examined by inducing a change in one of the phenomena and observing associated changes in the others. Hypotheses are formulated to explain the observed changes, and then tested in further experiments. The general aim is to explain the abnormal phenomena of mental disorders in terms of psychological processes that have been shown to account for normal experiences in healthy people.

It should be noted that the term experimental psychopathology is also used to cover a wider range of experimental work that might throw light on psychiatric disorder. This usage includes studies of animals as well as of humans; for example, studies of animal learning and behavioural responses to frustration or punishment.

This chapter is concerned mainly with phenomenological psychopathology, although reference will also be made to relevant ideas from dynamic or experimental psychopathology.

The most important exponent of phenomenological psychopathology was the German psychiatrist philosopher, Karl Jaspers. His classical work, *Allgemeine Psychopathologie [General psychopathology],* first appeared in 1913, and was a landmark in the development of clinical psychiatry. It provides the most complete account of the subject and contains much of interest, particularly in its early chapters. The seventh (1959) edition is available in an English translation by Hoenig and Hamilton (Jaspers 1963). Alternatively, useful outlines of the principles of phenomenology have been given by Hamilton (1985) and by Scharfetter (1980).

The significance of individual symptoms

It is often mistaken to conclude that a person is mentally ill on the evidence of an individual symptom. Even hallucinations, which are generally regarded as hallmarks of mental illness, are sometimes experienced by healthy people, for example when falling asleep. Symptoms are often recognized as indicating mental illness because of their intensity and persistence. None the less, even when intense and persistent, a single symptom does not necessarily indicate illness. It is the characteristic grouping of symptoms into a syndrome that is important.

Primary and secondary symptoms

The terms primary and secondary are used in describing symptoms, but with more than one meaning. The first is temporal; primary meaning antecedent and secondary meaning subsequent. The second is causal; primary meaning a direct expression of the pathological process and secondary meaning a reaction to the primary symptoms. The two meanings are often related—the symptoms appearing first in time being direct expressions of the pathological process.

It is preferable to use the terms primary and secondary in the temporal sense because it is factual. However, many patients cannot give a clear account of the chronological development of their symptoms. In these cases a distinction between primary and secondary symptoms in the temporal sense cannot be made with certainty. If this happens, it is only possible to conjecture whether one symptom could be a reaction to another; for example, whether the fixed idea of being followed by persecutors could be a reaction to hearing voices.

The form and content of symptoms

When psychiatric symptoms are described, it is usual to distinguish between form and content, a distinction that can be best explained with an example. If a patient says that, when he is entirely alone, he hears voices calling him a homosexual, then the form of his experience is an auditory hallucination (i.e. a sensory

perception in the absence of an external stimulus) while the content is the statement that he is homosexual. A second person might hear voices saying he is about to be killed: the form is still an auditory hallucination but the content is different. A third might experience repeated intrusive thoughts that he is homosexual but realize that these are untrue. He has an experience with the same content as the first (concerning homosexuality) but the form is different—in this case an obsessional thought.

Description of symptoms and signs

Introduction

In the following sections, symptoms and signs are described in a different order from the one adopted when the mental state is examined. The order is changed because it is useful to begin with the most distinctive phenomena—hallucinations and delusions. This change should be borne in mind when reading Chapter 2 in which the description of the mental state examination begins with behaviour and talk rather than hallucinations and delusions.

The definitions in this section generally conform with those in the Present State Examination (PSE) a widely used standardized rating system adopted by the World Health Organization for an international study of major mental disorders. The PSE definitions were developed in several stages. The original items were chosen to represent the clinical practice of a group of psychiatrists working in western Europe. The first definitions were modified progressively through several editions, used in a large Anglo-American diagnostic project; included modifications arising from a study of schizophrenia carried out in countries in Europe, Asia, and the Americas; incorporates further refinements suggested by analysis of the previous studies. The PSE therefore provides useful common ground between psychiatrists working in different countries and contains definitions that can be applied reliably. Before we consider individual symptoms it is appropriate to remind the reader that it is important not only to study individual mental phenomena but also to consider the whole person. The doctor must try to understand how the patient fulfils social roles such as worker, spouse, parent, friend, or sibling. He should consider what effect the disorders of function have had upon the remaining healthy parts of the person. Above all he should try to understand what it is like for this person to be ill, e.g. to care for small children while profoundly depressed or to live with the symptoms and disabilities of schizophrenia. The doctor will gain such understanding only if he is prepared to spend time listening to patients and their families and to interest himself in every aspect of their lives.

Disorders of perception

Perception and imagery

Perception is the process of becoming aware of what is presented through the sense organs. **Imagery** is an experience within the mind, usually without the sense of reality that is part of perception. **Eidetic imagery** is a visual image which is so intense and detailed that it has a 'photographic' quality. Unlike perception, imagery can be called up and terminated by voluntary effort. It is usually obliterated by seeing or hearing. Occasionally, imagery is so vivid that it persists when the person looks at a poorly structured background such as plain wallpaper. This condition is called **pareidolia,** a state in which real and unreal percepts exist side by side, the latter being recognized as unreal. Pareidolia can occur in acute organic disorders caused by fever, and in a few people it can be induced deliberately.

Alterations in perception

Perceptions can alter **in intensity and quality**. They can seem more intense than

usual, e.g. when two people experience the same auditory stimulus, such as the noise of a door shutting, the more anxious person may perceive it as louder. In mania, perceptions often seem very intense. Conversely, in depression colours may seem less intense. Changes in the quality of sensations occur in schizophrenia, sensations sometimes appearing distorted or unpleasant. For example, a patient may complain that food tastes bitter or that a flower smells like burning flesh.

Illusions

Illusions are misperceptions of external stimuli. They are most likely to occur when the general level of sensory stimulation is reduced. Thus at dusk a common illusion is to misperceive the outline of a bush as that of a man. Illusions are also more likely to occur when the **level of consciousness is reduced**, for example in an acute organic syndrome. Thus a delirious patient may mistake inanimate objects for people when the level of illumination is normal, though he is more likely to do so if the room is badly lit. Illusions occur more often when attention is not focused on the sensory modality, **or when there is a strong affective state ('affect illusions'),** e.g. in a dark lane a frightened person is more likely to misperceive the outline of a bush as that of an attacker. (The so-called **illusion of doubles or Capgras syndrome** is not an illusion but a form of delusional misinterpretation. It is considered under paranoid syndromes.)

Hallucinations

A hallucination is a percept **experienced in the absence of an external stimulus** to the sense organs, and with a similar quality to a true percept. A hallucination is experienced as originating in the outside world (or within one's own body) like a percept, and not within the mind like imagery.

Hallucinations are not restricted to the mentally ill. A few normal people experience them, especially when tired. Hallucinations also occur in healthy people during the transition between sleep and waking; they are called **hypnagogic** if experienced while falling asleep and **hypnopompic** if experienced during awakening.

Pseudohallucinations

This term has been applied to abnormal phenomena that do not meet the above criteria for hallucinations and are of less certain diagnostic significance. Unfortunately the word has two meanings which are often confused. The first, originating in the work of Kadinsky, was adopted by Jaspers (1913) in his book *General psychopathology.* In this sense, **pseudohallucinations** are especially vivid mental images; that is, they lack the quality of representing external reality and **seem to be within the mind rather than in external space.** However, unlike ordinary imagery, they cannot be changed substantially by an effort of will. The term is still used with this meaning. The second meaning of pseudohallucination is the experience of perceiving something as in the external world, while recognizing that there is no external correlate to the experience.

Both definitions are difficult to apply because they depend on the patient's ability to give precise answers to difficult questions about the nature of his experience. Judgements based on the patient's recognition of the reality of his experience are, not surprisingly, difficult to make reliably because the patient is often uncertain himself. Although the percepts must be experienced as either in the external world (but out of reach of a sense organ) or within the mind, patients often find this distinction difficult to make.

Types of hallucination

Hallucinations can be described in terms of their complexity and their sensory modality (see Table 1.1). The term **elementary hallucination** is used for experiences such as bangs, whistles, and flashes of light; **complex hallucination** is used for experiences such as hearing voices or music, or seeing faces and scenes.

Hallucinations may be auditory, visual, gustatory, olfactory, tactile, or of deep

sensation. **Auditory hallucinations** may be experienced as noises, music, or voices. Hallucinatory 'voices' are sometimes called **phonemes** if they consist of clear syllables or **akoasms** if they doesn’t sound articulate such as grating sound or noise. Voices may be heard clearly or indistinctly; they may seem to speak words, phrases, or sentences; and they may seem to address the patient, or talk to one another referring to the patient as 'he' or 'she' **(third person hallucinations).** Sometimes voices seem to anticipate what the patient thinks a few moments later, or speak his own thoughts as he thinks them, or repeat them immediately after he has thought them. In the absence of concise English technical terms, the

Table 1.1. Description of hallucinations

1. According to complexity
   elementary / complex
2. According to sensory modality:

auditory / visual / olfactory and gustatory / somatic (tactile and deep)

3. According to special features
   (a) auditory: second person / third person *Gedankenlautwerden echo de la pensee*
   (b) visual: extracampine
4. Autoscopic hallucinations

last two experiences are sometimes called ***Gedankenlautwerden*** and ***echo de la pensee*** respectively.

Visual hallucinations may also be elementary or complex. They may appear normal or abnormal in size; if the latter, they are more often **smaller than the corresponding real percept**. Visual hallucinations of dwarf figures are sometimes called **lilliputian**. **Extracampine visual hallucinations** are experienced as located outside the field of vision, that is, behind the head. **Olfactory and gustatory hallucinations** are frequently experienced together, often as unpleasant smells or tastes.

Tactile hallucinations, sometimes called **haptic hallucinations,** may be experienced as sensations of being touched, pricked, or strangled. They may also be felt as movements just below the skin which the patient may attribute to insects, worms, or other small creatures burrowing through the tissues. **Hallucinations of deep sensation (senestopathy)** may occur as feelings of the viscera being pulled upon or distended, or of sexual stimulation or electric shocks.

An **autoscopic hallucination** is the experience of seeing one's own body projected into external space, usually in front of oneself, for short periods. This experience may convince the person that he has a double *(doppelgtinger),* a theme occurring in several novels, including Dostoevsky's *The Double.* In clinical practice this is a rare phenomenon, mainly encountered in a small minority of patients with temporal lobe epilepsy or other organic brain disorders.

Occasionally, a stimulus in one sensory modality results in a hallucination in another, e.g. the sound of music may provoke visual hallucinations. This experience, sometimes called **reflex hallucinations,** may occur after taking drugs such as LSD, or, rarely, in schizophrenia.

As already mentioned, **hypnagogic and hypnopompic hallucinations** occur at the point of falling asleep and of waking respectively. When they occur in healthy people, they are brief and elementary—for example hearing a bell ring or a name called. Usually the person wakes suddenly and recognizes the nature of the experience. In narcolepsy, hallucinations are common but may last longer and be more elaborate.

Diagnostic associations

Hallucinations may occur in severe affective disorders, schizophrenia, organic disorders and dissociative states, and at times among healthy people. Therefore the finding of hallucinations does not itself help much in diagnosis. However, certain kinds of hallucination do have important implications for diagnosis.

Both the form and content of **auditory hallucinations** can help in diagnosis. Of the various types—noises, music, and voices—the only ones of diagnostic significance are voices heard as speaking clearly to or about the patient. As explained already, voices which appear to be talking to each other, referring to the patient in the third person (e.g. 'he is a homosexual') are called **third person hallucinations.** They are associated particularly with schizophrenia. Such voices may be experienced as commenting on the patient's intentions (e.g. 'he wants to make love to her') or actions (e.g. 'she is washing her face'). Of all types of hallucination, commentary voices are most suggestive of schizophrenia.

Second person hallucinations appear to address the patient (e.g. 'you are going to die') or give commands (e.g. 'hit him') or give commands– **imperative hallucinations**. In themselves they do not point to a particular diagnosis, but their content and especially the patient's reaction may do so. For example, voices with derogatory content suggest severe depressive disorder, especially when the patient accepts them as justified (e.g. 'you are wicked'). In schizophrenia the patient more often resents such comments.

Voices which anticipate, echo, or repeat the patient's thoughts also suggest schizophrenia.

Visual hallucinations may occur in hysteria, severe affective disorders, and schizophrenia, but they should always raise the possibility of an organic disorder. The content of visual hallucinations is of little significance in diagnosis.

Hallucinations of taste and smell are infrequent. When they do occur they often have an unusual quality which patients have difficulty in describing. They may occur in schizophrenia or severe depressive disorders, but they should also suggest temporal lobe epilepsy or irritation of the olfactory bulb or pathways by a tumour.

Tactile and somatic hallucinations are not generally of diagnostic significance although a few special kinds are weakly associated with particular disorders. Thus, hallucinatory sensations of sexual intercourse suggest schizophrenia, especially if interpreted in an unusual way (e.g. as resulting from intercourse with a series of persecutors). The sensation of insects moving under the skin occurs in people who abuse cocaine and occasionally among schizophrenics.

Perception and meaning A percept has a meaning for the person who experiences it. In some psychiatric disorders an abnormal meaning may be associated with a normal percept. When this happens we speak of **delusional perception.** In some neurological disorders percepts lose their meaning. This is called **agnosia.**

Disorders of thinking

Disorders of thinking are usually recognized from speech and writing. They can also be inferred from inability to perform tasks; thus one psychological test of thought disorder requires the person to sort objects into categories.
The term disorder of thinking can be used in a wide sense to denote four separate groups of phenomena (Table 1.2). The first group comprises particular kinds of abnormal thinking—delusions and obsessional thoughts. The second group, disorders of the stream of thought, is concerned with abnormalities of the amount and the speed of the thought experienced. The third group, known as disorders of the form of thought, is concerned with abnormalities of the ways in which thoughts are linked together. The fourth group, abnormal beliefs about the possession of thoughts, comprises unusual disturbances of the normal awareness that one's thoughts are one's own.

The second and third groups are considered here, whilst the first and last will be discussed later in the chapter.

Table 1.2. Disorders of thinking

1. Particular kinds of abnormal thoughts Delusions Obsessions
2. Disorders of the stream of thought (speed and pressure)

3. Formal thought disorder (linking of thoughts together)
4. Abnormal beliefs about the possession of thoughts

Disorders of the stream of thought

In disorders of the stream of thought both the amount and the speed of thoughts are changed. At one extreme there is **pressure of thought,** when ideas arise in unusual variety and abundance and pass through the mind rapidly. At the other extreme there is **poverty of thought**, when the patient has only a few thoughts, which lack variety and richness, and seem to move through the mind slowly. The experience of pressure occurs in mania; that of poverty in depressive disorders. Either may be experienced in schizophrenia.

The stream of thought can also be interrupted suddenly, a phenomenon which the patient experiences as his **mind going blank**, and which an observer notices as a sudden interruption in the flow of conversation. Minor degrees of this experience are common, particularly in people who are tired or anxious. By contrast, **thought blocking,** a particularly abrupt and complete interruption, strongly suggests schizophrenia. Because thought blocking has this importance in diagnosis, it is essential that it should be identified only when there is no doubt about its presence. Inexperienced interviewers often wrongly identify a sudden interruption of conversation as thought blocking. There are several other reasons why the flow of speech may stop abruptly: the patient may be distracted by another thought or an extraneous sound, or he may be experiencing one of the momentary gaps in the stream of thought that are normal in people who are anxious or tired. Thought blocking should only be identified when interruptions in speech are sudden, striking, and repeated, and when the patient describes the experience as an abrupt and complete emptying of his mind. The diagnostic association with schizophrenia is strengthened if the patient also interprets the experience in an unusual way, e.g. as having had his thoughts taken away by a machine operated by a persecutor.

Disorders of the form of thought

Disorders of the form of thought can be divided into three subgroups, **flight of ideas, perseveration, and loosening of associations.** Each is related to a particular form of mental disorder, so that it is important to distinguish them, but in none of the three is the relationship strong enough to be regarded as diagnostic.

In **flight of ideas** the patient's thoughts and conversation move quickly from one topic to another so that one train of thought is not completed before another appears. These rapidly changing topics are understandable because the links between them are normal, a point that differentiates them from loosening of associations (see below). In practice, the distinction is often difficult to make, especially when the patient is speaking rapidly. For this reason it may be helpful to tape record a sample of speech and listen to it several times. The characteristics of flight of ideas are: preservation of the ordinary logical sequence of ideas, using two words with a similar sound (clang associations) or the same word with a second meaning (punning), rhyming, and responding to distracting cues in the immediate surroundings. Flight of ideas is characteristic of mania.

Perseveration is the persistent and inappropriate repetition of the same thoughts. The disorder is detected by examining the person's words or actions. Thus, in response to a series of simple questions, the person may give the correct answer to the first but continue to give the same answer inappropriately to subsequent questions. Perseveration occurs in dementia but is not confined to this condition.

Loosening of associations denotes a loss of the normal structure of thinking. To the interviewer this appears as muddled and illogical conversation that cannot be clarified by further enquiry. Several features of this muddled thinking have been described (see below), but in the end it is usually the general lack of clarity in the patient's conversation that makes the most striking impression. This muddled thinking differs from that of people who are anxious or of low intelligence. Anxious people give a more coherent account when they have been put at ease, while

those with subnormal intelligence can express ideas more clearly if the interviewer simplifies his questions. When there is loosening of associations, the interviewer has the experience that the more he tries to clarify the patient's thoughts the less he understands them. Loosening of associations occurs most often in schizophrenia.

Loosening of associations can take several forms. **Knight's move or derailment** refers to a transition from one topic to another, either between sentences or in mid-sentence, with no logical relationship between the two topics and no evidence of the forms of association described under flight of ideas. When this abnormality is extreme it disrupts not only the connections between sentences and phrases but also the finer grammatical structure of speech. It is then called **word salad.** The term **verbigeration** refers to a kind of stereotypy in which sounds, words, or phrases are repeated in a senseless way.

One effect of loosened associations on the patient's conversation is sometimes called **talking past the point** (also known by the German term ***vorbeireden)***. In this condition the patient seems always about to get near to the matter in hand but never quite reaches it.

Several attempts have been made to devise psychological tests to detect loosening of associations, but the results have not been particularly useful to the clinician. Attempts to use the tests to diagnose schizophrenia have failed.

In addition to these disorders of links between ideas, thoughts may become illogical through **widening of concepts,** i.e. the grouping together of things that are not normally regarded as closely connected with one another.

Neologisms

Although not a disorder of the form of thought, neologism is conveniently described here. In this abnormality of speech the patient uses words or phrases, invented by himself, often to describe his morbid experiences. Neologisms must be distinguished from incorrect pronunciation, the wrong use of words by people with limited education, dialect words, obscure technical terms, and the 'private words' which some families invent to amuse themselves. The interviewer should always record examples of the patient's words and ask what he means by them.

Theories of thought disorder

Many theories have been proposed but none is convincing (see Payne 1973 for a review). Each theory attempts to explain a particular aspect of the thought disorder found in schizophrenia. Thus Goldstein (1944) built his theory round the apparent difficulty in forming abstract concepts ('con-creteness'), while Cameron (1938) developed Bleuler's original observation that there is a 'loosening of associations', i.e. that the boundaries between concepts are less clear then in normal people. Payne and Friedlander (1962) developed the theory that concepts are too wide (over-inclusive) and devised ways of testing for over-inclusiveness with problems requiring the sorting and classification of objects. Bannister (1962) used Kelly's personal construct theory as the basis of a similar scheme, in which schizophrenics were supposed to have constructs that are not as consistent as those of other people and not as well structured. Bannister and Fransella (1966) devised an ingenious test in which these aspects of personal constructs are assessed by asking subjects to rate photographs of unknown people for a number of attributes such as kindness, honesty, and selfishness. Although the test provides a method of measuring one aspect of thought disorder, the theory has not succeeded in explaining how the abnormality arises.

Delusions

A delusion is **a belief that is firmly held on inadequate grounds, is not affected by rational argument or evidence to the contrary, and is not a conventional belief such that the person might be expected to hold given his educational and cultural background.** This definition is intended to separate delusions, which are indicators of mental disorder, from other kinds of strongly held belief found among healthy people. A delusion is usually a false belief, but not invariably so.

The hallmark of the delusion is that it is firmly held on inadequate grounds, that

is, the belief is not arrived at through normal processes of logical thinking. It is held with such conviction that it cannot be altered by evidence to the contrary. For example, a patient who holds the delusion that there are persecutors in the adjoining house will not be convinced by evidence that the house is empty; instead he will retain his belief by suggesting, for example, that the persecutors left the house before it was searched. It should be noted that non-delusional ideas of normal people can sometimes be equally impervious to reasoned argument, for example, certain shared beliefs of people with a common religious or ethnic background. Thus a person who has been brought up to believe in spiritualism is unlikely to change his convictions when presented with contrary evidence that convinces a non-believer.

Although delusions are usually false beliefs, in exceptional circumstances they can be true or subsequently become true. A well recognized example is pathological jealousy (p. 334). A man may develop a jealous delusion about his wife, in the absence of any reasonable evidence of infidelity. Even if the wife is actually being unfaithful at the time, the belief is still delusional if there is no rational ground for holding it. The point to stress is that it is not falsity that determines whether the belief is delusional, but the nature of the mental processes that led up to the belief. Conversely, it is a well-known pitfall of clinical practice to assume that a belief is false because it is odd, instead of checking the facts or finding out how the belief was arrived at. For example, improbable stories of persecution by neighbours, or of attempts at poisoning by a spouse, may turn out to be arrived at through normal processes of logical thinking, and, in fact, to be correct.

The definition of a delusion emphasizes that the belief must be firmly held. However, the belief may not be so firmly held before or after the delusion has been fully formed. Although some delusions arrive in the patient's mind fully formed and with total conviction, other delusions develop more gradually. **Similarly, during recovery from his disorder, a patient may pass through a stage of increasing doubt about his belief before finally rejecting it as false.** The term ***partial delusion*** is sometimes used to denote these phenomena (as in the Present State Examination, see p. 4). It is safest to use the term partial delusion only when it is known to have been preceded by a full delusion, or (with hindsight) to have later developed into a full delusion. Partial delusions are sometimes found during the early stages of schizophrenia. When partial delusions are met, they cannot be given much weight in themselves, but a careful search should be made for other phenomena of mental illness.

Although a patient may be wholly convinced that a delusional belief is true, this conviction does not necessarily influence all his feelings and actions. This separation of belief from feeling and action is known as *double orientation*. It occurs most often in chronic schizophrenics. Such a patient may, for example, believe that he is a member of a Royal Family while living contentedly in a hostel for discharged psychiatric patients.

Delusions must be distinguished from ***overvalued ideas,*** which were first described by Wernicke (1900). **An overvalued idea is an isolated, preoccupying belief, neither delusional nor obsessional in nature, which comes to dominate a person's life for many years and may affect his actions. The preoccupying belief may be understandable when the person's background is known.** For example, a person whose mother and sister suffered from cancer one after the other may become preoccupied with the conviction that cancer is contagious. Although the distinction between delusions and overvalued ideas is not always easy to make, this difficulty seldom leads to practical problems because diagnosis of mental illness depends on more than the presence or absence of a single symptom. (For further information about overvalued ideas the reader is referred to McKenna 1984.)

Delusions are of many kinds, which will now be described. In the following section, the reader may find it helpful to refer to Table 1.3.

Primary, secondary, and shared delusions

A primary or autochthonous delusion is one that appears suddenly and with full conviction but without any mental events leading up to it. For example, a

schizophrenic patient may be suddenly and completely convinced that he is changing sex, without ever having thought of it before and without any preceding ideas or events which could have led in any understandable way to this conclusion. The belief arrives in the mind suddenly, fully formed, and in a totally convincing form. Presumably it is a direct expression of the pathological process causing the mental illness— a primary symptom. **Not all primary delusional experiences start with an idea; a delusional mood** (see p. 17) or a **delusional perception** (see p. 17) can also arrive suddenly and without any antecedents to account for them. Of course, patients do not find it easy to remember the exact sequence of such unusual and often distressing mental events and for this reason it is difficult to be certain what is primary. Inexperienced interviewers usually diagnose primary delusional experiences too readily because they do not probe carefully enough into their antecedents. Primary delusions are given considerable weight in the diagnosis of schizophrenia, and it is important not to record them unless they are present for certain.

Table 1.3. Descriptions of delusions

1. According to fixity
   - complete
   - partial

2. According to onset
   - primary / secondary

3. Other delusional experiences: delusional mood /delusional perception /delusional memory

4. According to theme
   - persecutory (paranoid)
   - delusions of reference
   - grandiose (expansive)
   - delusions of guilt and worthlessness
   - nihilistic
   - hypochondriacal
   - religious
   - jealous
   - sexual or amorous
   - delusions of control
   - delusions concerning possession of thought
   - delusions of thought broadcasting

5. According to other features: shared delusions

Secondary delusions can be understood as derived from some preceding morbid experience. The latter may be of several kinds, such as: a hallucination, e.g. someone who hears voices may come to believe that he is being followed; a mood, e.g. a person who is profoundly depressed may believe that people think he is worthless; or an existing delusion, e.g. a person with the delusion that he has lost all his money may come to believe he will be put in prison for failing to pay debts. Some secondary delusions seem to have an integrative function, making the original experiences more comprehensible to the patient, as in the first example above. Others seem to do the opposite, increasing the sense of persecution or failure, as in the third example.

The accumulation of secondary delusions may result in a complicated delusional system in which each belief can be understood as following from the one before. When a complicated set of interrelated beliefs of this kind has developed the delusions are sometimes said to be **systematized.**

Shared delusions: as a rule, other people recognize delusions as false and argue with the patient in an attempt to correct them. Occasionally, a person who lives with a deluded patient comes to share his delusional

beliefs. This condition is known as shared delusions or ***folie a deux.*** Although the second person's delusional conviction is as strong as the partner's while the couple remain together, it often recedes quickly when they are separated.

Delusional moods, perceptions, and memories

As a rule, when a patient first experiences a delusion he also has an emotional response and interprets his environment in a new way. For example, a person who believes that a group of people intend to kill him is likely to feel afraid. At the same time he may interpret the sight of a car in his driving mirror as evidence that he is being followed. In most cases, the delusion comes first and the other components follow.

Occasionally the order is reversed: the first experience is change of mood, often a feeling of anxiety with the foreboding that some sinister event is about to take place, and the delusion follows. In German this change of mood is called ***Wahnstimmung,*** a term usually translated as **delusional mood.** The latter is an unsatisfactory term because there is really a mood from which a delusion arises. At other times, the first change may be attaching a new significance to a familiar percept without any reason. For example, a new arrangement of objects on a colleague's desk may be interpreted as a sign that the patient has been chosen to do God's work. This is called **delusional perception:** this term is also unsatisfactory since it is not the patient's perceptions that are abnormal, but the false meaning that has been attached to a normal percept. Although both terms are less than satisfactory, there is no generally agreed alternative and they have to be used if the experience is to be labelled. However, it is usually better simply to describe what the patient has experienced and to record the order in which changes have occurred in beliefs, affect, and the interpretation of sense data.

In a related disorder a patient sees a familiar person and believes him to have been replaced by an impostor who is the exact double of the original. This symptom is sometimes called by the French term ***l'illusion de sosies*** (illusion of doubles), but it is of course a delusion, not an illusion. The symptom may be so persistent that a syndrome, the **Capgras syndrome,** has been described in which it is the central feature (see p. 339). The opposite false interpretation of experience occurs when a patient recognizes a number of people as having different appearances, but believes they are a single persecutor in disguise. This abnormality is called the **Fregoli delusion.** It is described further on p. 339.

Finally, some delusions concern past rather than present events, and are known as **delusional memories.** For example, if a patient believes that there is a plot to poison him he may attribute new significance to the memory of an occasion when he vomited after eating a meal, long before his delusional system began. This experience has to be distinguished from the accurate recall of a delusional idea formed at the time. The term is unsatisfactory because it is not the memory that is delusional, but the interpretation that has been applied to it.

Delusional themes

For the purposes of clinical work, delusions are grouped according to their main themes. This grouping is useful because there is some correspondence between themes and the major forms of mental illness. However it is important to remember that there are many exceptions to the broad associations mentioned below.

Persecutory delusions are often called **paranoid,** a term which strictly speaking has a wider meaning. The term paranoid was used in ancient Greek writings in the modern sense of 'out of his mind', and Hippocrates used it to describe febrile delirium. Many later writers applied the term to grandiose, erotic, jealous, and religious, as well as persecutory, delusions. For this reason, it is preferable not to use the term paranoid to describe a persecutory delusion. However, the term paranoid applied in its wide sense to symptoms, syndromes and personality types retains its usefulness (see Chapter 10).

Persecutory delusions are most commonly concerned with persons or organizations that are thought to be trying to inflict harm on the patient, damage his reputation, make him insane, or poison him. Such delusions are common but of little help in diagnosis, for they can occur in organic states, schizophrenia, and severe affective disorders. However, the patient's attitude to the delusion may point to the diagnosis: in a severe depressive disorder he characteristically accepts

the supposed activities of the persecutors as justified by his own guilt and wickedness, but in schizophrenia he resents them, often angrily. In assessing such ideas, it is essential to remember that apparently improbable accounts of persecution are sometimes true and that it is normal in certain cultures to believe in witchcraft and to ascribe misfortune to the malign activities of other people.

Delusions of reference are concerned with the idea that objects, events, or people have a personal significance for the patient: for example, an article read in a newspaper or a remark heard on television is believed to be directed specifically to himself. Alternatively a radio play about homosexuals is thought to have been broadcast in order to tell the patient that everyone knows he is a homosexual. Delusions of reference may also relate to actions or gestures made by other people which are thought to convey something about the patient; for example, people touching their hair may be thought to signify that the patient is turning into a woman. Although most delusions of reference have persecutory associations they may also relate to grandiose or reassuring themes.

Grandiose or expansive delusions are beliefs of exaggerated self-importance. The patient may think himself wealthy, endowed with unusual abilities, or a special person. Such ideas occur in mania and in schizophrenia.

Delusions of guilt and worthlessness are found most often in depressive illness, and are therefore sometimes called depressive delusions. Typical themes are that a minor infringement of the law in the past will be discovered and bring shame upon the patient, or that his sinfulness will lead to divine retribution on his family.

Nihilistic delusions are strictly speaking beliefs about the non-existence of some person or thing, but their meaning is extended to include pessimistic ideas that the patient's career is finished, that he is about to die, that he has no money, or that the world is doomed. Nihilistic delusions are associated with extreme degress of depressed mood. Comparable ideas concerning failures of bodily function (e.g. that the bowels are blocked with putrefying matter) often accompany nihilistic delusions. The resulting clinical picture is called **Cotard's syndrome** after the French psychiatrist who described it (Cotard 1882). The condition is considered further in Chapter 10.

Hypochondriacal delusions are concerned with illness. The patient may believe wrongly, and in the face of all medical evidence to the contrary, that he is ill. Such delusions are more common in the elderly, reflecting the increasing concern with health among mentally normal people at this time of life. Other delusions may be concerned with cancer or venereal disease, or with the appearance of parts of the body, especially the nose. Patients with delusions of the last kind sometimes request plastic surgery .

Religious delusions: delusions with a religious content were much more frequent in the nineteenth century than they are today (Klaf and Hamilton 1961), presumably reflecting the greater part that religion played in the life of ordinary people in the past. When unusual and firmly held religious beliefs are encountered among members of minority religions, it is advisable to speak to another member of the group before deciding whether the ideas (e.g. apparently extreme ideas about divine punishment for minor sins) are abnormal or not.

Delusions of jealousy are more common among men. Not all jealous ideas are delusions; less intense jealous preoccupations are common, and some obsessional thoughts are concerned with doubts about the spouse's fidelity. However, when the beliefs are delusional they have particular importance because they may lead to dangerously aggressive behaviour towards the person thought to be unfaithful. Special care is needed if the patient follows the spouse to spy on her, examines her clothes for marks of semen, or searches her handbag for letters. A person with delusional jealousy will not be satisfied if he fails to find evidence supporting his beliefs; his search will continue. These important problems are discussed further in Chapter 10.

Sexual or amorous delusions: both sexual and amorous delusions are rare but when they occur, they are more frequent among women. Delusions concerning sexual intercourse are often secondary to somatic hallucinations felt in the genitalia. A woman with amorous delusions believes that she is loved by a man who is usually inaccessible, of higher social status, and someone to whom she has never even spoken. Erotic delusions are the most prominent feature of **De Clerambault's**

syndrome which is discussed in Chapter 10.

Delusions of control: the patient who has a delusion of control believes that his actions, impulses, or thoughts are controlled by an outside agency. Because the symptom strongly suggests schizophrenia, it is important not to record it unless definitely present. A common error is to diagnose it when not present. Sometimes the symptom is confused with the experience of hearing hallucinatory voices giving commands that the patient obeys voluntarily. At other times it is misdiagnosed because the patient has mistaken the question for one about religious beliefs concerning the divine control of human actions. The patient with a delusion of control firmly believes that individual movements or actions have been brought about by an outside agency; for example that his arms are moved into the position of crucifixion not because he willed them to do so, but because an outside force brought it about.

Delusions concerning the possession of thoughts: healthy people take for granted that their thoughts are their own. They also assume that thoughts are private experiences that can be known to other people only if spoken aloud, or revealed by facial expression, gesture, or action. Patients with delusions about the possession of thoughts may lose these convictions in several ways. Those with delusions about **thought insertion** believe that some of their thoughts are not their own but have been implanted by an outside agency. This experience differs from that of the obsessional patient who may be distressed by unpleasant thoughts but never doubts that they originate within his own mind. As Lewis (1957) said, obsessional thoughts are 'home made but disowned'. The patient with a delusion of thought insertion will not accept that the thoughts have originated in his own mind. Patients with **delusions of thought withdrawal** believe that thoughts have been taken out of their mind. This delusion usually accompanies thought blocking, so that the patient experiences a break in the flow of thoughts through his mind and believes that the 'missing' thoughts have been taken away by some outside agency, often his supposed persecutors.

In delusions of thought broadcasting the patient believes that his unspoken thoughts are known to other people, through radio, telepathy, or in some other way. Some patients also believe that their thoughts can
be heard by other people (a belief which also accompanies the experience of hearing one's own thoughts spoken, *Gedankenlautwerden).*

All three of these symptoms occur much more commonly in schizophrenia than in any other disorder.

The causes of delusions

So little is known about the processes by which normal beliefs are formed and tested against evidence, that it is not surprising that we are ignorant about the cause of delusions. This lack of knowledge has not, however, prevented the development of several theories, mainly concerned with persecutory delusions.

One of the best known theories was developed by Freud. The central ideas were expressed in a paper originally published in 1911 (Freud 1958): 'the study of a number of cases of delusions of persecution has led me as well as other investigators to the view that the relation between the patient and his persecutor can be reduced to a simple formula. It appears that the person to whom the delusion ascribes so much power and influence is either identical with someone who played an equally important part in the patient's emotional life before illness, or an easily recognizable substitute for him. The intensity of the emotion is projected in the shape of external power, while its quality is changed into the opposite. The person who is now hated and feared for being a persecutor was at one time loved and honoured. The main purpose of the persecution asserted by the patient's delusion is to justify the change in his emotional attitude'. Freud further summarized his view as follows: delusions of persecution are the result of the sequence. I do not *love* him—I *hate* him, because he persecutes me'; erotomania of the sequence I do not love *him*—I love *her,* because *she loves me';* and delusions of jealousy of the sequence 'It is not / who loved the man—*she* loves him' (Freud 1958, pp.63-4, emphases in the original). This hypothesis suggests therefore that patients who experience persecutory delusions have repressed homosexual impulses. So far, attempts to test this idea have not produced convincing evidence in its favour (see Arthur 1964). Nevertheless, the general idea that

persecutory delusions involve the defence mechanism of projection has been accepted by some writers.

Several existential analyses of delusions have been made. These describe in detail the experience of the deluded patient and make the important point that the delusion affects the whole being—it is not just an isolated symptom. Conrad (1958), using the approach of Gestalt psychology, described the delusional experience as having four stages starting from a delusional mood which he called trema (fear and trembling), leading via the delusional idea which he called apophenia (the appearance of the phenomenon), to the person's efforts to make sense of the experience by revising his whole view of the world. These efforts break down in the last stage (apocalypse) when thought disorder and behavioural "symptoms appear. While a sequence of this kind can be observed in a few patients it is certainly not invariable.

Learning theorists have tried to explain delusions as a form of avoidance of highly unpleasant emotions. Thus Dollard and Miller (1950) suggested that a delusion is a learned explanation for events which avoids feelings of guilt or shame. This idea is as unsupported by evidence as all the other theories of delusion formation. Readers who wish to find out more about the subject should consult Arthur (1964).

Obsessional and compulsive symptoms

These symptoms are more common than delusions but generally of less serious significance. Obsessional and compulsive symptoms are best described separately although they often occur together.

Obsessions are **recurrent, persistent thoughts, impulses, or images that enter the mind despite the person's efforts to exclude them. The characteristic feature is the subjective sense of a struggle—the patient resisting the obsession which nevertheless intrudes into his awareness. Obsessions are recognized by the person as his own and not implanted from elsewhere. They are often regarded by him as untrue or senseless —an important point of distinction from delusions. They are generally about matters which the patient finds distressing or otherwise unpleasant.**

The presence of resistance is important because, together with the lack of conviction about the truth of the idea, it distinguishes obsessions from delusions. However, when obsessions have been present for a long time, the amount of resistance often becomes less. This seldom causes diagnostic difficulties because by the time it happens, the nature of the symptom has usually been established.

Obsessions can occur in several forms (Table 1.4).

Table 1.4. Obsessional and compulsive symptoms

1. Obsessions: thoughts
   ruminations doubts impulses obsessional phobias
2. Compulsions (rituals)
3. Obsessional slowness

Obsessional **thoughts** are repeated and intrusive words or phrases, which are usually upsetting to the patient; e.g. repeated obscenities or blasphemous phrases coming into the awareness of a religious person. Obsessional **ruminations** are repeated worrying themes of a more complex kind; e.g. about the ending of the world. Obsessional **doubts** are repeated themes expressing uncertainty about previous actions, e.g. whether or not the person turned off an electrical appliance that might cause a fire. Whatever the nature of the doubt, the person realizes that the action has, in fact, been completed safely. Obsessional **impulses** are repeated urges to carry out actions, usually actions that are aggressive, dangerous, or socially embarrassing. Examples are the urge to pick up a knife and stab another person; to jump in front of a train; to shout obscenities in church. Whatever the urge, the person has no wish to carry it out, resists it

strongly, and does not act on it.

Obsessional phobias are obsessional thoughts with a fearful content; e.g. 'I may have cancer'; or obsessional impulses that lead to anxiety and avoidance; e.g. the impulse to strike another person with a knife with the consequent avoidance of knives. The term is confusing (see below under phobias).

Although the themes of obsessions are various, most can be grouped into one or other of six categories: dirt and contamination, aggression, orderliness, illness, sex and religion. Thoughts about **dirt** and **contamination** are usually associated with the idea of harming others through the spread of disease. **Aggressive** thoughts may be about striking another person or shouting angry or obscene remarks in public. Thoughts about **orderliness** may be about the way objects are to be arranged or work is to be organized. Thoughts about **illness** are usually of a fearful kind; e.g. a dread of cancer or venereal disease. This tearfulness has resulted in the name **illness phobia,** but this term should be avoided because the phenomena are not examples of anxiety arising in specific situations (which is the hallmark of a phobia, see below). Obsessional ideas about **sex** usually concern practices which the patient would find shameful, such as anal intercourse. Obsessions about **religion** often take the form of doubts about the fundamentals of belief (e.g. 'does God exist?') or repeated doubts whether sins have been adequately confessed **.(scruples).**

Compulsions are repetitive and seemingly purposeful behaviours, performed in a stereotyped way (hence the alternative name of **compulsive rituals).** They are accompanied by a subjective sense that they must be carried out and by an urge to resist. Like obsessions, compulsions are recognized as senseless. A compulsion is usually associated with an obsession as if it has the function of reducing the distress caused by the latter. For example, a handwashing compulsion often follows obsessional thoughts that the hands are contaminated with faecal matter. Occasionally, however, the only associated obsession is an urge to carry out the compulsive act.

Compulsive acts are of many kinds, but three are particularly common. **Checking** rituals are often concerned with safety; e.g. checking over and over again that a gas tap has been turned off. **Cleaning** rituals often take the form of repeated handwashing but may also involve household cleaning. **Counting** rituals may be spoken aloud or rehearsed silently. They often involve counting in a special way, e.g. in threes, and are frequently associated with doubting thoughts such that the count must be repeated to make sure it was carried out adequately in the first place. In **dressing** rituals the person has to lay out his clothes in a particular way, or put them on in a special order. Again, the ritual is often accompanied by doubting thoughts that lead to seemingly endless repetition. In severe cases patients may take several hours to put on their clothes in the morning.

Obsessional slowness is usually the result of compulsive rituals or repeated doubts but it can occur occasionally without them (primary obsessional slowness).

The differential diagnosis of obsessional thoughts is from the ordinary preoccupations of healthy people, from the repeated concerns of anxious and depressed patients, from the recurring ideas and urges encountered in sexual deviations or drug dependency, and from delusions. Ordinary preoccupations do not have the same insistent quality and can be resisted by an effort of will. Many anxious or depressed patients experience intrusive thoughts (for example, the anxious person may think that he is about to faint, or the depressed person that he has nothing to live for), but they do not find these ideas unreasonable and they do not resist them. Similarly, sexual deviants and drug-dependent people often experience insistent ideas and images concerned with their sexual practices or habits of drug taking, but these ideas are usually welcomed rather than resisted. Delusions are likewise not resisted, and are firmly held to be true.

Theories about the **aetiology** of obsessions are discussed in Chapter 7, where obsessional neuroses are considered.

Phobias

A phobia is a persistent irrational fear of and wish to avoid a specific object, activity, or situation. The fear is irrational in the sense that it is out of proportion to the real

danger and is recognized as such by the person experiencing it. The person finds it difficult to control his fear and often tries to avoid the feared objects and situations if possible. The object that provokes the fear may be a living creature such as a dog, snake, or spider, or a natural phenomenon such as darkness or thunder. Fear-provoking situations include high places, crowds, and open spaces. Phobic patients feel anxious not only in the presence of the objects or situations but also when thinking about them **(anticipatory anxiety).**

Isolated phobic symptoms are common among normal people and have been described since the earliest medical writings (see Lewis 1976 or Errera 1962 for a historical account). The variety of feared objects and situations is great. In the past, Greek names were given to each one (Pitres and Regis 1902 labelled some seventy in this way), but there is nothing to be gained by this practice.

As pointed out earlier, obsessional thoughts leading to anxiety and avoidance are often called **obsessional phobias;** e.g. a recurrent thought about doing harm with knives is sometimes called a phobia of knives because the person is anxious in the presence of these objects and avoids them. Similarly, obsessional thoughts about illness are sometimes called illness phobias (e.g. 'I may have cancer'). Strictly speaking neither of these symptoms is a phobia. Nor is dysmorphophobia, which is a disorder of bodily awareness (see p. 417).

Depersonalization and derealization

Depersonalization is a change of self-awareness such that the person feels unreal. Those who have this condition find it difficult to describe, often speaking of being detached from their own experience and unable to feel emotion. A similar change in relation to the environment is called **derealization.** In this condition, objects appear unreal and people appear as lifeless, two-dimensional 'cardboard' figures. Despite the complaint of inability to feel emotion, both depersonalization and derealization are described as highly unpleasant experiences.

These central features are often accompanied by other morbid experiences. There is some disagreement whether these experiences are part of depersonalization and derealization or separate symptoms. These accompanying features include changes in the experience of time; changes in the body image such as a feeling that a limb has altered in size or shape; and occasionally a feeling of being outside one's own body and observing one's own actions, often from above. These features do not occur in every case (Ackner *1954a).*

Because patients find it difficult to describe the feelings of depersonalization and derealization, they often resort to metaphor. Unless careful enquiry is made, this can lead to confusion between descriptions of depersonalization and of delusional ideas. For example, a patient's description of depersonalization may be 'as if part of my brain had stopped working', or of derealization 'as if the people I meet are lifeless creatures'—statements which must be explored carefully to distinguish them from delusional beliefs that the brain is no longer working or that people have really changed. At times, this distinction may be very difficult to make.

Depersonalization and derealization are experienced quite commonly as transient phenomena by healthy adults and children, especially when tired. The experience usually begins abruptly and in normal people seldom lasts more than a few minutes (Sedman 1970). The symptoms have been reported after sleep deprivation (Bliss *et a!.* 1959), after sensory deprivation (Reed and Sedman 1964), and as an effect of hallucinogenic drugs (Guttman and Maclay 1936). The symptoms also occur in many psychiatric disorders when they may be persistent, sometimes lasting for years. They are particularly associated with generalized and phobic anxiety disorders, depressive disorders, and schizophrenia. Depersonalization has also been described in epilepsy, especially the kind arising in the temporal lobe. Some psychiatrists, notably Shorvon *et al.* (1946), have described a separate depersonalization syndrome (see p. 214). Because depersonalization and derealization occur in so many disorders, they do not help in diagnosis.

There are several **aetiological theories** about depersonalization. Mayer-Gross (1935) proposed that it is a 'preformed functional response of the brain' in the sense that an epileptic fit is a preformed response. Others have suggested that

depersonalization is a response to alterations in consciousness (which is consistent with its appearance during fatigue and sleep deprivation in normal people).

A third suggestion is that depersonalization occurs when anxiety becomes excessive. Thus Lader and Wing (1966) described one anxious patient who developed depersonalization during an experiment in which skin conductance and heart rate were being measured. An accompanying fall in these measures suggested that depersonalization might have been an expression of some mechanism that reduced anxiety. However, depersonalization can occur when consciousness is normal and anxiety is absent so that, at best, these ideas can explain only a proportion of cases. Moreover, in states with undoubted changes in consciousness (acute organic psychosyndromes) depersonalization is found in only a minority of patients. The same argument can be applied to states of anxiety. Other writers have suggested that depersonalization is the expression of a disorder of perceptual mechanisms, and some psychoanalytic authors regard it as a defence against emotion. These various theories, none of which is satisfactory, have been reviewed by Sedman (1970).

Motor symptoms and signs

Abnormalities of social behaviour, facial expression, and posture occur frequently in mental illness of all kinds. They are discussed in Chapter 3 where the examination of the patient is considered. There are also a number of specific motor symptoms. With the exception of tics these symptoms are mainly observed among schizophrenic patients. They are described briefly here for reference, and their clinical associations are discussed in Chapter 9.

Tics are irregular repeated movements involving a group of muscles, e.g. sideways movement of the head or the raising of one shoulder. **Mannerisms** are repeated movements that appear to have some functional significance, e.g. saluting. **Stereotypies** are repeated movements that are regular (unlike tics) and without obvious significance (unlike mannerisms): for example, rocking to and fro. **Posturing** is the adoption of unusual bodily postures continuously for a long time. The posture may appear to have a symbolic meaning, e.g. standing with both arms outstretched as if being crucified; or may have no apparent significance, e.g. standing on one leg. Patients are said to show **negativism** when they do the opposite of what is asked and actively resist efforts to persuade them to comply. **Echopraxia** is the imitation of the interviewer's movement automatically even when asked not to do so. Patients are said to exhibit **ambitendence** when they alternate between opposite movements, e.g. putting out the arm to shake hands, then withdrawing it, extending it again, and so on. **Waxy flexibility** is detected when a patient's limbs can be placed in a position in which they then remain for long periods whilst at the same time muscle tone is uniformly increased.

Disorders of the body image

The body image or body schema is a person's subjective representation against which the integrity of his body is judged and the movement and

Anosognosia is a lack of awareness of disease, and it too is more often manifest on the left side of the body. Most often it occurs briefly in the early days after acute hemiplegia but occasionally it persists. The patient does not complain of the disability on the paralysed side and denies it when pointed out to him. There may also be denial of dysphasia, blindness **(Anton's syndrome),** or amnesia (most marked in Korsakov's syndrome). **Pain asymbolia** is a disorder in which the patient perceives a normally painful stimulus but does not recognize it as painful. Although these disorders are clearly associated with cerebral lesions, it has been suggested that there is a psychogenic element whereby the awareness of unpleasant things is repressed (see, for example, Weinstein and Kahn 1955). Although it is hardly possible that structural damage could act in the absence of psychological reactions, it seems unlikely that the latter can be the sole cause of a condition that is so much more frequent on the left side of the body.

Autotopagnosia is the inability to recognize, name, or point on command to parts

of the body. The disorder may also apply to parts of the body of another person, but not to inanimate objects. It is a rare condition which arises from diffuse lesions, usually affecting both sides of the brain. Nearly all the cases can be explained by accompanying apraxia, dysphasia, or disorder of spatial perception (see Lishman 1987, p. 63).

Distorted awareness of size and shape includes feelings that a limb is enlarging, becoming smaller, or otherwise being distorted. Unlike the phenomena described so far, these experiences are not related closely to lesions of specific areas of the brain. They may occur in healthy people especially when falling asleep, or in the waking state, when very tired. They are sometimes reported in the course of migraine, in acute brain syndromes, as part of the aura of epilepsy, or after taking LSD. Changes of shape and size of body parts are also described by some schizophrenic patients. The person is nearly always aware that the experience is unreal, except in some cases of schizophrenia.

Reduplication phenomenon is the experience that part or all of the body has doubled. Thus the person may feel he has two left arms, or two heads, or that the whole body has been duplicated. These phenomena have been reported rarely in the course of migraine and temporal lobe epilepsy as well as in schizophrenia. In an extreme form the person has the experience of being aware of a copy of his whole body, a phenomenon already described under the heading of autoscopic hallucinations.

Coenestopathic states are localized distortions of body awareness, for example the nose feels as if it is made of cotton wool.

Disorders of memory

Failure of memory is called **amnesia.** Several kinds of memory failure are met in psychiatric disorders, and it might be expected that these would correspond broadly to the processes of memory thought to exist in healthy people. Although psychologists do not agree completely about the structure of normal memory, the following general scheme is widely accepted. Human memory behaves as if organized in three kinds of 'stores'. Sensory stores have a limited capacity to receive information from the sense organs and to retain it for a brief period (about 0.5 s), presumably so that processing can be undertaken. The second store— **primary memory or short-term memory**—also has a limited capacity, but information is held for rather longer than in the sensory store, being lost in about 15-20 s. Information can be retained for longer by repeated rehearsal (as in repeating an unfamiliar phone number until it has been dialled fully). There may be two short-term stores, one for verbal and the other for visual information, located respectively in the left and right hemispheres.

The third kind of store is secondary memory or **long-term memory** which receives information that has been selected for more permanent storage. Unlike short-term memory, this kind of store has a large capacity and holds information for a long time. Information in this store is 'processed' and stored according to certain characteristics such as the meaning or sound of words. Information also seems to be stored partly according to the emotional state of the person at the time when the event occurred, and to be more easily recalled when the person is in the same state; thus memories of events occurring during an unhappy mood are recalled more readily in an unhappy than in a happy state. Two useful distinctions can be made about the working of long-term memory. The first is between memory for events **(episodic memory)** and memory for language and knowledge **(semantic memory).** The second is between the recognition of material presented to the person, and **recall** without a cue: the latter is the more difficult.

Memory is affected in several kinds of psychiatric disorder. Thus in depressive disorders there is differential recall of unhappy memories (p. 25). Organic brain disorder generally affects all aspects of secondary memory, but some organic conditions give rise to an interesting partial effect known as the amnestic syndrome (p. 354) in which the person is unable to remember events occurring a few minutes before (impaired episodic memory), but can converse normally (intact semantic memory).

After a period of unconsciousness there is poor memory for the interval between

the ending of complete unconsciousness and the restoration of full consciousness **(anterograde amnesia).** Some causes of unconsciousness (e.g. head injury and ECT) also lead to inability to recall events before the onset of unconsciousness **(retrograde amnesia).**

In some neurological and psychiatric disorders, patients have a peculiar disturbance of recall, either failing to recognize events that have been encountered before ***(jamais** vu),* or reporting the recognition of events that are in fact novel *(deja vu).* Some patients with extreme difficulty in remembering may report as memories, events that have not taken place at the time in question (or may never have involved the person at all)—a disorder known as **confabulation.** For a review of psychological studies of memory see Baddeley (1976). s

Disorders of consciousness

Consciousness is awareness of the self and the environment. The level of consciousness can vary between the extremes of alertness and coma. The quality of consciousness can also vary: sleep differs from unconsciousness, and stupor differs from both (see below).

Many terms have been used for states of impaired consciousness. **Coma** is the most extreme form. The patient shows no external evidence of mental activity and little motor activity other than breathing. He does not respond even to strong stimuli. Coma can be graded by the extent of the remaining reflex responses, and by the type of EEG activity. **Sopor** is an infrequently used term for a state in which the person can be aroused only by strong stimulation. **Clouding of consciousness** refers to a state in which the patient is drowsy and reacts incompletely to stimuli. Attention, concentration, and memory are impaired and orientation is disturbed. Thinking seems slow and muddled, and events may be interpreted inaccurately.

Stupor refers to a condition in which the patient is immobile, mute, and unresponsive but appears to be fully conscious, usually because the eyes are open and follow external objects. If the eyes are closed, the patient resists attempts to open them. Reflexes are normal and resting posture is maintained, though it may be awkward. (Note that in neurology the term implies impaired consciousness.)

Confusion means inability to think clearly. It occurs characteristically in organic states, but in some functional disorders as well. In acute organic disorder confusion occurs together with partial impairment of consciousness, illusions, hallucinations, delusions, and a mood change of anxiety or apprehension. The resulting syndrome has been called a confusional state, but this term is not well defined and it is preferable to avoid it (see p. 348). Three variations of this syndrome may be mentioned. The first is an **oneiroid** (dream-like) state in which the patient, although not asleep, describes experiences of vivid imagery akin to that of a dream. When such a state is prolonged it is sometimes called a **twilight state** (see p. 348). **Torpor** is a state in which the patient appears drowsy, readily falls asleep, and shows evidence of slow thinking and narrowed range of perception.

Disorders of attention and concentration

Attention is the ability, to focus on the matter in hand. Concentration is the ability to maintain that focus. These abilities may be impaired in a wide variety of psychiatric disorders including depressive disorders, mania, anxiety disorders, schizophrenia, and organic disorders. Therefore the finding of abnormalities of attention and concentration does not assist in diagnosis. Nevertheless these abnormalities are important in management: for example, they affect the patient's ability to give or receive information, and poor concentration can interfere with a patient's ability to work or pass his leisure time, for example in reading or watching television.

Insight

Insight may be defined as awareness of one's own mental condition. It is difficult to achieve, since it involves some knowledge of what constitutes a healthy mind, and yet doctors cannot agree among themselves about the meaning of terms such as mental health and mental illness. Moreover, insight is not simply present or absent, but rather a matter of degree. For this reason it is better to consider four separate questions. First, is the patient aware of phenomena that other people have observed (e.g. that he appears to be unusually active and elated)? Second, if so, does he recognize that these phenomena are abnormal (or does he, for example, maintain that his unusual activity and cheerfulness are merely normal high spirits)? Third, if he recognizes the phenomena as abnormal, does he consider that they are caused by mental illness, as opposed to, for example, a physical illness or the results of poison administered to him by his enemies? Fourth, if he accepts that he is ill, does he think he needs treatment?

The answers to these questions are much more informative—and much more likely to be reliable—than those of the single question: is insight present or not? Newcomers to psychiatry often ask this question because they have read that loss of insight distinguishes psychoses from neuroses. While it is generally true that neurotic patients retain insight and psychotic patients lose it, this is not invariable; nor is this in practice a reliable way of distinguishing between the two. Also the concepts of neurosis and psychosis are themselves unsatisfactory (see p. 79). On the other hand, the four questions listed above can help the clinician decide whether the patient is likely to co-operate with treatment.

The mechanisms of defence

So far, we have been concerned with aspects of descriptive psychopathol-ogy; or in other words with abnormal mental experiences which the patient can describe and with changes in behaviour which other people can observe. We now turn to an aspect of dynamic psychopathology that deserves special attention at this stage. It is concerned neither with mental events that the patient can describe, nor with his behaviour. Instead it is a set of processes that may help to *explain* certain kinds of experience or behaviour. These processes are called mechanisms of defence. They originated in the work of Sigmund Freud and have been elaborated by his daughter Anna Freud (1936). In the following account, the more important defence mechanisms are defined and brief examples given of the kinds of mental events and behaviour that they may explain. It is important to understand, at the start, that defence mechanisms are automatic and unconscious: they imply the patient is not acting deliberately nor is he aware of his real motives at the time, though he may become aware of such motives later either through introspection or because they have been pointed out to him by another person.

Defence mechanisms have been used to account for what Freud called the psychopathology of everyday life and to explain the aetiology of mental disorders. The illustrations of mechanisms of defence that appear in the following paragraphs are all concerned with everyday thoughts and actions. This is because these kinds of explanation are useful in understanding many aspects of the day-to-day behaviour of patients whether they have psychiatric or medical conditions. In subsequent chapters consideration is given to theories that have attempted to explain neurotic symptoms and personality disorders in terms of the same mechanisms.

Repression is the exclusion from awareness of impulses, emotions, and memories that would cause distress if allowed to enter consciousness. For example, a memory of an event in which a person was humiliated may be kept out of his awareness. (e.g.forgetting sexual abuse from your childhood due to the trauma and anxiety)

Denial, a closely related concept, is inferred when a person behaves as though unaware of something which he may reasonably be expected to know. For example, a patient who has been told that he has cancer, may subsequently speak and act as though not aware of it (or denying that his physician's diagnosis of cancer is correct and seeking a second opinion).

Projection refers to the unconscious attribution to another person of thoughts or feelings that are one's own, thereby rendering the original feelings more acceptable. For example, someone who dislikes a colleague may impute feelings of anger and dislike to him. In this way, his own feelings of dislike may appear justified and become less distressing. When losing an argument, you state "You're just Stupid" .

Regression refers to the unconscious adoption of a pattern of behaviour appropriate to an earlier stage of development. For example - sitting in a corner and crying after hearing bad news; throwing a temper tantrum when you don't get your way. It is commonly seen among physically ill people who adopt a child-like dependency on nurses and doctors. During the acute stage of illness this dependency is often an adaptive response enabling the patient to accept the requirements of intensive medical and nursing care; however, if it persists, it can impede rehabilitation.

Reaction formation refers to the unconscious adoption of behaviour opposite to that which would reflect true feelings and intentions. For example, excessively prudish attitudes to the mention of sexual intercourse in conversation, books, or the media may occur in someone who has strong sexual drives that he cannot consciously accept.

Displacement refers to the unconscious process of transferring emotion from a situation or object with which it is properly associated, to another which will give rise to less distress. Thus after the recent death of his wife a man may blame the family doctor for failing to give her adequate treatment, instead of blaming himself for putting his own work before her needs in the last months of her life, slamming a door instead of hitting as person, yelling at your spouse after an argument with your boss.

Rationalization refers to the unconscious provision of a false but acceptable explanation for behaviour which has other, less acceptable origins. For example, a husband who neglects his wife and goes to entertainments without her may give himself the false explanation that she is shy and would not enjoy them; stating that you were fired because you didn't kiss up the boss, when the real reason was your poor performance

Sublimation is a related concept which refers to the unconscious diversion of unacceptable impulses into acceptable outlets; for example, turning angry feelings into vigorous sporting activities, or turning the wish to dominate other people into organizing charitable activities (sublimating your aggressive impulses toward a career as a boxer; becoming a surgeon because of your desire to cut; lifting weights to release 'pent up' energy).

Identification refers to the unconscious process of taking on some of the activities or characteristics of another person, often to reduce the pain of separation or loss. For example a widow may take on the same work in local government that her husband used to undertake, or she may try to think about things in the way that he would have done.

intellectualization

avoiding unacceptable emotions by focusing on the intellectual aspects

focusing on the details of a funeral as opposed to the sadness and grief

suppression

pushing into the unconscious

trying to forget something that causes you anxiety