

General issues

Before individual phenomena are described, some general issues will be considered concerning the methods of studying symptoms and signs, and the terms that are used to describe them.

Psychopathology

The study of abnormal states of mind is known as *psychopathology*. The term embraces two distinct approaches to the subject—*descriptive* and *experimental*. This chapter is concerned almost exclusively with the former; the latter is introduced here but is discussed in later chapters.

Descriptive psychopathology

Descriptive psychopathology is the objective description of abnormal states of mind avoiding, as far as possible, preconceived ideas or theories, and limited to the description of conscious experiences and observable behaviour. It is sometimes also called *phenomenology* or *phenomenological psychopathology*, although the terms are not in fact synonymous, and phenomenology has additional meanings (Berrios, 1992). Likewise, descriptive psychopathology is more than just *symptomatology* (Stanghellini and Broome, 2014).

The aim of descriptive psychopathology is to elucidate the essential qualities of morbid mental experiences and to understand each patient's experience of illness. It therefore requires the ability to elicit, identify, and interpret the symptoms of psychiatric disorders, and as such is a key element of clinical practice; indeed, it has been described as 'the fundamental professional skill of the psychiatrist'.

The most important exponent of descriptive psychopathology was the German psychiatrist and philosopher, Karl Jaspers. His classic work, *Allgemeine Psychopathologie* (*General Psychopathology*), first published in 1913, still provides the most complete account of the subject, and the seventh edition is available in an English translation (Jaspers, 1963). A briefer introduction can be found in Jaspers (1968), and Oyeboode (2014) has provided a highly readable contemporary text on descriptive psychopathology.

Experimental psychopathology

This approach seeks to explain abnormal mental phenomena, as well as to describe them. One of the first attempts was *psychodynamic psychopathology*, originating in Freud's psychoanalytic investigations (see p. 91). It explains the causes of abnormal mental events in terms

of mental processes of which the patient is unaware (i.e. they are 'unconscious'). For example, Freud explained persecutory delusions as being evidence, in the conscious mind, of activities in the unconscious mind, including the mechanisms of repression and projection (see p. 277).

Subsequently, experimental psychopathology has focused on empirically measurable and verifiable conscious psychological processes, using experimental methods such as cognitive and behavioural psychology and functional brain imaging. For example, there are cognitive theories of the origin of delusions, panic attacks, and depression. Although experimental psychopathology is concerned with the causes of symptoms, it is usually conducted in the context of the syndromes in which the symptoms occur. Thus its findings are discussed in the chapter covering the disorder in question.

Terms and concepts used in descriptive psychopathology

Symptoms and signs

In general medicine there is a clear definition of, and separation between, a symptom and a sign. In psychiatry the situation is different. There are few 'signs' in the medical sense (apart from the motor abnormalities of catatonic schizophrenia or the physical manifestations of anorexia nervosa), with most diagnostic information coming from the history and observations of the patient's appearance and behaviour. Use of the word 'sign' in psychiatry is therefore less clear, and two different uses may be encountered. First, it may refer to a feature noted by the observer rather than something spoken by the patient (e.g. a patient who appears to be responding to a hallucination). Secondly, it may refer to a group of symptoms that the observer interprets in aggregation as a sign of a particular disorder. In practice, the phrase 'symptoms and signs' is often used interchangeably with 'symptoms' (as we have done in this chapter) to refer collectively to the phenomena of psychiatric disorders, without a clear distinction being drawn between the two words.

Subjective and objective

In general medicine, the terms *subjective* and *objective* are used as counterparts of symptoms and signs, respectively, with 'objective' being defined as something observed directly by the doctor (e.g. meningism, jaundice)—even

though, strictly speaking, it is a subjective judgement on his part as to what has been observed.

In psychiatry, the terms have broadly similar meanings as they do in medicine, although with a blurring between them, just as there is for symptoms and signs. 'Objective' refers to features observed during an interview (i.e. the patient's appearance and behaviour). The term is usually used when the psychiatrist wants to compare this with the patient's description of symptoms. For example, in evaluation of depression, complaints of low mood and tearfulness are subjective features, whereas observations of poor eye contact, psychomotor retardation, and crying are objective ones. If both are present, the psychiatrist might record 'subjective *and* objective evidence of depression', with the combination providing stronger evidence than either alone. However, if the patient's behaviour and manner in the interview appear entirely normal, he records 'not objectively depressed', despite the subjective complaints. It is then incumbent on the psychiatrist to explore the reasons for the discrepancy and to decide what diagnostic conclusions he should draw. As a rule, objective signs are accorded greater weight. Thus he may diagnose a depressive disorder if there is sufficient evidence of this kind, even if the patient denies the subjective experience of feeling depressed. Conversely, the psychiatrist may question the significance of complaints of low mood, however prominent, if there are none of the objective features associated with the diagnosis.

Form and content

When psychiatric symptoms are described, it is useful to distinguish between form and content, a distinction that is best explained by an example. If a patient says that, when he is alone, he hears voices calling him a homosexual, the *form* of the experience is an auditory hallucination (see below), whereas the *content* is the statement that he is homosexual. Another patient might hear voices saying that she is about to be killed. Again the form is an auditory hallucination, but the content is different. A third patient might experience repeated intrusive thoughts that he is homosexual, but he realizes that these are untrue. Here the content is the same as that of the first example, but the form is different.

Form is often critical when making a diagnosis. From the examples given above, the presence of a hallucination indicates (by definition) a psychosis of one kind or another, whereas the third example suggests obsessive-compulsive disorder. Content is less diagnostically useful, but can be very important in management; for example, the content of a delusion may suggest that the patient could attack a supposed persecutor. It is also the

content, not the form, that is of concern to the patient, whose priority will be to discuss the persecution and its implications, and who may be irritated by what seem to be irrelevant questions about the form of the belief. The psychiatrist must be sensitive to this difference in emphasis between the two parties.

Primary and secondary

With regard to symptoms, the terms *primary* and *secondary* are often used, but unfortunately with two different meanings. The first meaning is *temporal*, simply referring to which occurred first. The second meaning is *causal*, whereby primary means 'arising directly from the pathological process', and secondary means 'arising as a reaction to a primary symptom'. The two meanings often coincide, as symptoms that arise directly from the pathological process usually appear first. However, although subsequent symptoms are often a reaction to the first symptoms, they are not always of this kind, for they too may arise directly from the pathological process. The terms primary and secondary are used more often in the temporal sense because this usage does not involve an inference about causality. However, many patients cannot say in what order their symptoms appeared. In such cases, when it seems likely that one symptom is a reaction to another—for example, that a delusion of being followed by persecutors is a reaction to hearing accusing voices—it is described as secondary (using the word in the causal sense). The terms primary and secondary are also used in descriptions of syndromes.

Understanding and explanation

Jaspers (1913) contrasted two forms of understanding when applied to symptoms. The first, called *Verstehen* ('understanding'), is the attempt to appreciate the patient's subjective experience: what does it feel like? This important skill requires intuition and empathy. The second approach, called *Erklären* ('explanation'), accounts for events in terms of external factors; for example, the patient's low mood can be 'explained' by his recent redundancy. The latter approach requires knowledge of psychiatric aetiology (Chapter 5).

The significance of individual symptoms

Psychiatric disorders are diagnosed when a defined group of symptoms (a syndrome) is present. Almost any single symptom can be experienced by a healthy person; even hallucinations, often regarded as a hallmark of severe mental disorder, are experienced by some otherwise healthy people. An exception to this is that a delusion, even if isolated, is generally considered to

be evidence of psychiatric disorder if it is unequivocal and persistent (see Chapter 11). In general, however, the finding of a single symptom is not evidence of psychiatric disorder, but an indication for a thorough and, if necessary, repeated search for other symptoms and signs of psychiatric disorder. The dangers of not adhering to this principle are exemplified by the well-known study by Rosenhan (1973). Eight ‘patients’ presented with the complaint that they heard the words ‘empty, hollow, thud’ being said out loud. All eight individuals were admitted and diagnosed with schizophrenia, despite denying all other symptoms and behaving entirely normally. This study also illustrates the importance of descriptive psychopathology, and of reliable diagnostic criteria (see Chapter 2), as fundamental aspects of psychiatry.

The patient’s experience

Symptoms and signs are only part of the subject matter of psychopathology. The latter is also concerned with the patient’s experience of illness, and the way in which psychiatric disorder changes his view of himself, his hopes for the future, and his view of the world (Stanghellini and Broome, 2014). This may be seen as one example of the understanding (*verstehen*) mentioned above. A depressive disorder may have a very different effect on a person who has lived a satisfying and happy life and has fulfilled his major ambitions, compared with a person who has had many previous misfortunes but has lived on hopes of future success. To understand this aspect of the patient’s experience of psychiatric disorder, the psychiatrist has to understand him in the way that a biographer understands his

subject. This way of understanding is sometimes called the life-story approach. It is not something that can be readily assimilated from textbooks; it is best learned by taking time to listen to patients. The psychiatrist may be helped by reading biographies or works of literature that provide insights into the ways in which experiences throughout life shape the personality, and help to explain the diverse ways in which different people respond to the same events.

Cultural variations in psychopathology

The core symptoms of most serious mental disorders are present in culturally diverse individuals. However, there are cultural differences in how these symptoms present in clinical settings and to the meanings that are attributed to them. For example, depression can present with prominent somatic symptoms in many Asian populations, such as those from India and China. The content of symptoms can also differ between cultures. For example, for sub-Saharan African populations, delusions not infrequently centre upon being cursed, a rare delusional theme in Europeans. Cultural differences also affect the person’s subjective experience of illness, and therefore influence that person’s understanding of it (Fabrega, 2000). In some cultures, the effects of psychiatric disorder are ascribed to witchcraft—a belief that adds to the patient’s distress. In many cultures, mental illness is greatly stigmatized, and can, for example, hinder prospects of marriage. In such a culture the effect of illness on the patient’s view of himself and his future will be very different from the effect on a patient living in a society that is more tolerant of mental disorder.

Descriptions of symptoms and signs

Disturbances of emotion and mood

Much of psychiatry is concerned with abnormal emotional states, particularly disturbances of mood and other emotions, especially anxiety. Before describing the main symptoms of this kind, it is worth clarifying two areas of terminology that may cause confusion, in part because their usage has changed over the years.

First, the term ‘mood’ can either be used as a broad term to encompass all emotions (e.g. ‘anxious mood’), or in a more restricted sense to mean the emotion that runs from depression at one end to mania at the other.

The former usage is now uncommon. The latter usage is emphasized by the fact that, in current diagnostic systems, ‘mood disorders’ are those in which depression and mania are the defining characteristics, whereas disorders defined by anxiety or other emotional disturbances are categorized separately. In this section, features common to both ‘mood’ and ‘other emotions’ are described first, before the specific features of anxiety, depression, and mania are discussed separately.

The second point concerns the term ‘affect’. This is now usually used interchangeably with the term ‘mood’, in the more limited meaning of the latter word (e.g. ‘his affect was normal’, ‘he has an affective disorder’).

However, in the past, these words had different nuances of meaning; mood referred to a prevailing and prolonged state, whereas affect was linked to a particular aspect or object, and was more transitory.

Emotions and mood may be abnormal in three ways:

- Their nature may be altered
- They may fluctuate more or less than usual
- They may be inconsistent with the patient's thoughts or actions, or with his current circumstances.

Changes in the nature of emotions and mood

These can be towards anxiety, depression, elation, or irritability and anger. Any of these changes may be associated with events in the person's life, but they may arise without an apparent reason. They are usually accompanied by other symptoms and signs. For example, an increase in anxiety is accompanied by autonomic overactivity and increased muscle tension, and depression is accompanied by gloomy preoccupations and psychomotor slowness.

Changes in the way that emotions and mood vary

Emotions and mood vary in relation to the person's circumstances and preoccupations. In abnormal states, this variation with circumstances may continue, but the variations may be greater or less than normal. Increased variation is called *lability* of mood; extreme variation is sometimes called *emotional incontinence*.

Reduced variation is called *blunting* or *flattening*. These terms have been used with subtly different meanings, but are now usually used interchangeably. Blunting or flattening usually occurs in depression and schizophrenia. Severe flattening is sometimes called *apathy* (note the difference from the layman's meaning of the word).

Emotion can also vary in a way that is not in keeping with the person's circumstances and thoughts, and this is described as *incongruous* or *inappropriate*. For example, a patient may appear to be in high spirits and laugh when talking about the death of his mother. Such incongruity must be distinguished from the embarrassed laughter which indicates that the person is ill at ease.

Clinical associations of emotional and mood disturbances

Disturbances of emotions and mood are seen in essentially all psychiatric disorders. They are the central feature of the mood disorders and anxiety disorders. They are also common in eating disorders, substance-induced disorders, delirium, dementia, and schizophrenia.

Anxiety

Anxiety is a normal response to danger. Anxiety is abnormal when its severity is out of proportion to the threat of danger, or when it outlasts the threat. Anxious mood is closely coupled with somatic and autonomic components, and with psychological ones. All can be thought of as equivalent to the preparations for dealing with danger seen in other mammals, ready for flight from, avoidance of, or fighting with a predator. Mild-to-moderate anxiety enhances most kinds of performance, but very high levels interfere with it.

The anxiety response is considered further in Chapter 8. Here its main components can be summarized as follows.

- *Psychological*. The essential feelings of dread and apprehension are accompanied by restlessness, narrowing of attention to focus on the source of danger, worrying thoughts, increased alertness (with insomnia), and irritability (that is, a readiness to become angry).
- *Somatic*. Muscle tension and respiration increase. If these changes are not followed by physical activity, they may be experienced as muscle tension tremor, or the effects of hyperventilation (e.g. dizziness).
- *Autonomic*. Heart rate and sweating increase, the mouth becomes dry, and there may be an urge to urinate or defaecate.
- *Avoidance of danger*. A *phobia* is a persistent, irrational fear of a specific object or situation. Usually there is also a marked wish to avoid the object, although this is not always the case—for example, fear of illness (hypochondriasis). The fear is out of proportion to the objective threat, and is recognized as such by the person experiencing it. Phobias include fear of animate objects, natural phenomena, and situations. Phobic people feel anxious not only in the presence of the object or situation, but also when thinking about it (*anticipatory anxiety*). Phobias are discussed further in relation to anxiety disorders in Chapter 5.

Clinical associations

Phobias are common among healthy children, becoming less frequent in adolescence and adult life. Phobic symptoms occur in all kinds of anxiety disorder, but are the major feature in the phobic disorders.

Depression

Depression is a normal response to loss or misfortune, when it may be called grief or mourning. Depression is abnormal when it is out of proportion to the misfortune, or is unduly prolonged. Depressed mood is closely

coupled with other changes, notably a lowering of self-esteem, pessimistic or negative thinking, and a reduction in or loss of the experience of pleasure (*anhedonia*). A depressed person has a characteristic expression and appearance, with turned-down corners of the mouth, a furrowed brow, and a hunched, dejected posture. The level of arousal is reduced in some depressed patients (*psychomotor retardation*) but increased in others, with a consequent feeling of restlessness or agitation. The psychopathology of depression is discussed further in Chapter 9.

Clinical associations

Depression can occur in any psychiatric disorder. It is the defining feature of mood disorders, and commonly occurs in schizophrenia, anxiety, obsessive–compulsive disorder, eating disorders, and substance-induced disorders. It can also be a manifestation of an organic disorder.

Elation

Happy moods have been studied less than depressed mood. Elation is an extreme degree of happy mood which, like depression, is coupled with other changes, including increased feelings of self-confidence and well-being, increased activity, and increased arousal. The latter is usually experienced as pleasant, but sometimes as an unpleasant feeling of restlessness. Elation occurs most often in mania and hypomania.

Irritability and anger

Irritability is a state of increased readiness for anger. Both irritability and anger may occur in many kinds of disorder, so they are of little value in diagnosis. However, they are of great importance in risk assessment and risk management, as they may result in harm to others and self (see Chapter 3). Irritability may occur in anxiety disorders, depression, mania, dementia, and drug intoxication.

Disturbances of perception

Specific kinds of perceptual disturbance are symptoms of severe psychiatric disorders. It is therefore important to be able to identify these symptoms and to distinguish them from the other, much less significant, alterations in sensory experience which occur. We shall therefore describe perceptual phenomena in some detail.

Perception and imagery

Perception is the process of becoming aware of what is presented through the sense organs. It is not a direct awareness of data from the sense organs, because these

data are acted on by cognitive processes that reassemble them and extract patterns. Perception can be attended to or ignored, but it cannot be terminated by an effort of will.

Imagery is the awareness of a percept that has been generated within the mind. Imagery can be called up and terminated by an effort of will. Images are experienced as lacking the sense of reality that characterizes perception, so that a healthy person can distinguish between images and percepts. A few people experience *eidetic imagery*, which is visual imagery so intense and detailed that it has a ‘photographic’ quality akin to a percept, although in other ways it differs from a percept. Imagery is generally terminated when perception starts. Occasionally, imagery persists despite the presence of percept (provided this is weak and unstructured). This sort of imagery is called *pareidolia*.

Percepts may alter in intensity and in quality. Anxious people may experience sensations as more intense than usual; for example, they may be unusually sensitive to noise. In mania, perceptions seem more vivid than usual. Depressed patients may experience perceptions as dull and lifeless.

Illusions

Illusions are misperceptions of external stimuli. They occur when the general level of sensory stimulation is reduced and when attention is not focused on the relevant sensory modality. For example, at dusk the outline of a bush may be perceived at first as that of a man, although not when attention is focused on the outline. Illusions are more likely to occur when the level of consciousness is reduced, as in delirium, or when a person is anxious. Illusions have no diagnostic significance, but need to be distinguished from hallucinations.

Hallucinations

A *hallucination* is a percept that is experienced in the absence of an external stimulus to the corresponding sense organ. It differs from an illusion in being experienced as originating in the outside world or from within the person’s body (rather than as imagined). Hallucinations cannot be terminated at will.

Hallucinations are generally indications of significant psychiatric disorder, and specific types of hallucination are characteristic of different disorders, as outlined below. However, as noted above, hallucinations do occur in some otherwise healthy people. It is also common to experience them when falling asleep (*hypnagogic hallucinations*) or on waking (*hypnopompic hallucinations*). These two types of hallucination may be either visual or auditory, the latter sometimes as the experience of

hearing one's name called. Such hallucinations are common in narcolepsy (see page 327). Some recently bereaved people experience hallucinations of the dead person. Hallucinations can occur after sensory deprivation, in people with blindness or deafness of peripheral origin, occasionally in neurological disorders that affect the visual pathways, in epilepsy (see page 379), and in Charles Bonnet syndrome (see page 555).

Types of hallucination

Hallucinations can be described in terms of their complexity and their sensory modality (see Box 1.1). The term *elementary hallucination* refers to experiences such as bangs, whistles, and flashes of light, whereas the term *complex hallucination* refers to experiences such as hearing voices or music, or seeing faces and scenes.

Auditory hallucinations may be experienced as noises, music, or voices. Voices may be heard clearly or indistinctly; they may seem to speak words, phrases, or sentences. They may seem to address the patient directly (*second-person hallucinations*), or talk to one another, referring to the patient as 'he' or 'she' (*third-person hallucinations*). Sometimes patients say that the voices anticipate what they are about to think a few moments later. Sometimes the voices seem to speak the patient's thoughts as he is thinking them (*Gedankenlautwerden*),

or to repeat them immediately after he has thought them (*écho de la pensée*).

Visual hallucinations may also be elementary or complex. The content may appear normal or abnormal in size; hallucinations of dwarf figures are sometimes called *lilliputian*. Occasionally, patients describe the experience of visual hallucinations located outside the field of vision, usually behind the head (*extracampine hallucinations*).

Olfactory hallucinations and *gustatory hallucinations* are frequently experienced together. The smells and tastes are often unpleasant.

Tactile hallucinations, sometimes called *haptic hallucinations*, may be experienced as sensations of being touched, pricked, or strangled. Sometimes they are 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* may be experienced as feelings of the viscera being pulled upon or distended, or of sexual stimulation or electric shocks.

An *autoscopical hallucination* is the experience of seeing one's own body projected into external space, usually in front of oneself, for short periods. The experience is reported occasionally by healthy people in situations of sensory deprivation, when it is called an out-of-body experience, or after a near-fatal accident or heart attack, when it has been called a near-death experience. Rarely, the experience is accompanied by the conviction that the person has a double (*Doppelgänger*).

Reflex hallucination is a rare phenomenon, in which a stimulus in one sensory modality results in a hallucination in another; for example, music may provoke visual hallucinations.

Clinical associations of hallucinations

Hallucinations occur in diverse disorders, notably schizophrenia, severe mood disorder, organic disorders, and dissociative states. Therefore the finding of hallucinations does not itself help much in diagnosis. However, as with delusions, there are certain kinds of hallucination which do have important implications for diagnosis of schizophrenia and other disorders.

- *Auditory hallucination*. Only clearly heard voices (not noises or music) have diagnostic significance. Third-person hallucinations (introduced above) are strongly associated 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'), or may make critical comments. Second-person auditory

Box 1.1 Description of hallucinations

According to complexity

- Elementary
- Complex

According to sensory modality

- Auditory
- Visual
- Olfactory and gustatory
- Somatic (tactile and deep)

According to special features

- Auditory
- Second-person
- Third-person
- Gedankenlautwerden
- Écho de la pensée
- Visual
- Extracampine

Autoscopic hallucinations

- Reflex hallucinations
- Hypnagogic and hypnopompic

hallucinations (i.e. those that appear to address the patient) do not point to a particular diagnosis, but their content and the patient's reaction to them may do so. Thus voices with derogatory content (e.g. 'You are a failure, you are wicked') suggest severe depressive disorder, especially when the patient accepts them as justified. In schizophrenia, the patient more often resents such comments. Voices which anticipate, echo, or repeat the patient's thoughts also suggest schizophrenia.

- *Visual hallucinations* should always suggest the possibility of an organic disorder, although they also occur in severe affective disorders, schizophrenia, and dissociative disorder. The content of visual hallucinations is of little significance in diagnosis. Autoscopic hallucinations also raise suspicion of an organic disorder, such as temporal lobe epilepsy.
- *Hallucinations of taste and smell* are infrequent. They may occur in schizophrenia, severe depressive disorders, and temporal lobe epilepsy, and in tumours affecting the olfactory bulb or pathways.
- *Tactile and somatic hallucinations* are suggestive of schizophrenia, especially if they are bizarre in content or interpretation. The sensation of insects moving under the skin (*formication*) occurs in people who abuse cocaine.

Pseudohallucinations

This term refers to experiences that are similar to hallucinations but which do not meet all of the requirements of the definition, nor have the same implications. The word has two distinct meanings, which correspond to two of the ways in which an experience can fail to meet the criteria for a hallucination. In the first meaning, pseudohallucination is a sensory experience that differs from a hallucination in not seeming to the patient to represent external reality, being located within the mind rather than in external space. In this way pseudohallucinations resemble imagery although, unlike imagery, they cannot be dismissed by an effort of will. In the second meaning, the sensory experience appears to originate in the external world, but it seems unreal. For a more detailed discussion, see Hare (1973) and Taylor (1981).

Both definitions of pseudohallucinations are difficult to apply clinically, because patients can seldom describe their experiences in adequate detail. In any event, it is usually sufficient to decide whether a perceptual experience is a 'true' hallucination or not, since it is only the former which carries diagnostic significance. If it is not

a hallucination, the experience should be described, but need not be labelled as one kind of pseudohallucination or the other.

Abnormalities in the meaning attached to percepts

A *delusional perception* is a delusion arising directly from a normal percept. This is sometimes erroneously considered to be a perceptual disturbance, but it is really a disorder of thought, and is therefore discussed in the next section.

Disturbances of thoughts

Disturbances of thoughts and thought processes are among the most diagnostically significant symptoms in psychiatry. As with disturbances of perception, therefore, this area of descriptive psychopathology merits relatively detailed description. It covers two kinds of phenomena:

- *Disturbance of thoughts* themselves—that is, a change in the *nature* of individual thoughts. The category of delusion is particularly important. Disturbances of thought are covered in this section.
- *Disturbance of the thinking process* and the linking together of different thoughts; this may affect the speed or the form of the relationship between thoughts. It can occur even if individual thoughts are unremarkable in nature. These phenomena are covered in the next section.

Delusions

A *delusion* is a belief that is firmly held on inadequate grounds, that is not affected by rational argument or evidence to the contrary, and that is not a conventional belief that the person might be expected to hold given their educational, cultural, and religious background. This definition is intended to separate delusions, which are cardinal symptoms of severe psychiatric disorder (and specifically of psychosis), from other kinds of abnormal thoughts and from strongly held beliefs found among healthy people. There are several problems with the definition, which is summarized in Box 1.2, but it suffices as a starting point for more detailed discussion of delusions.

Although not part of the definition, another characteristic feature of delusions is that they have a marked effect on the person's feeling and actions—in the same way that strongly held normal beliefs do. Since the behavioural response to the delusion may itself be out of keeping or even bizarre, it is often this that

Box 1.2 Problems with the definition of delusions

Delusions are firmly held despite evidence to the contrary

The hallmark of a delusion is that it is held with such conviction that it cannot be altered by presenting 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 may suggest that the persecutors left the house shortly before it was searched. The problem with this criterion for delusions is that some of the ideas of normal people are equally impervious to contrary evidence. For example, the beliefs of a convinced spiritualist are not undermined by the counterarguments of a non-believer. Strongly held non-delusional beliefs are called *overvalued ideas* (see page 14).

A further problem with this part of the definition of delusion relates to *partial delusions*. Although delusions are usually held strongly from the start, sometimes they are at first held with a degree of doubt. Also, during recovery it is not uncommon for patients to pass through a stage of increasing doubt about their delusions before finally rejecting them. The term ‘partial delusion’ refers to both these situations of doubt. It should be used during recovery only when it is known that the beliefs were preceded by a full delusion, and applied to the development of a delusion only when it is known in retrospect that a full delusion developed later. Partial delusions are not, in isolation, helpful in diagnosis—akin to the status of pseudohallucinations mentioned on page 8.

Delusions are held on inadequate grounds

Delusions are not arrived at by the ordinary processes of observation and logic. Some delusions appear suddenly without any previous thinking about the subject (primary delusions). Other delusions appear to be attempts to explain another abnormal experiences—for example, the

delusion that hallucinated voices are those of people who are spying on the patient.

Delusions are not beliefs shared by others in the same culture

This criterion is important when the patient is a member of a culture or subculture (including a religious faith), because healthy people in such a group may hold beliefs that are not accepted outside it. Like delusions, such cultural beliefs are generally impervious to contrary evidence and reasoned argument—for example, beliefs in evil spirits. Therefore, before deciding that an idea is delusional, it is important to determine whether other members of the same culture share the belief.

Delusions as false beliefs

Some definitions of delusions indicate that they are false beliefs, but this criterion was not included in the definition given above. This omission is because, in exceptional circumstances, a delusional belief can be true or can subsequently become true. A well-recognized example relates to pathological jealousy (see page 306). It is not falsity that determines whether the belief is delusional, but the nature of the mental processes that led up to it. (The difficulty with this statement is that we cannot define these mental processes precisely.) There is a further practical problem concerning the use of falsity as a criterion for delusion. It is that if the criterion is used, it may be assumed that, because a belief is highly improbable, it is false. This is certainly not a sound assumption, because improbable stories—for example, of persecution by neighbours—sometimes turn out to be true and arrived at through sound observations and logical thought. Therefore ideas should be investigated thoroughly before they are accepted as delusions.

These issues are discussed further in Spitzer (1990) and Butler and Braff (1991). See Garety and Freeman (2013) for a cognitive account of delusions.

first brings the person to psychiatric attention, and leads to the delusion being elicited. For example, a man with the delusion that he was being irradiated by sonic waves covered his windows with silver foil and barricaded his door. Occasionally, however, a delusion has

little influence on feelings and actions. For example, a patient may believe that he is a member of the royal family while living contentedly in a group home. This separation is called *double orientation*, and usually occurs in chronic schizophrenia.

Types of delusions

Several types of delusions are recognized, and they are categorized either by the characteristics or by the theme of the delusion (see Box 1.3). Many of the terms are simply useful descriptors, but a few of them carry particular diagnostic implications; for example, specific types of delusions are *first rank symptoms* of schizophrenia (see page 255). Most categories of delusions can be diagnosed reliably (Bell *et al.*, 2006). For further descriptions, see also Oyeboode (2014).

Primary and secondary 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, for no reason and with no prior thoughts of this kind, that

he is changing sex. Not all primary delusional experiences start with an idea. Sometimes the first experience is a delusional mood (see below) or a delusional perception (see below). Because patients do not find it easy to remember the exact sequence of such unusual and distressing mental events, it is often difficult to be certain which experience came first. Primary delusions are given considerable weight in the diagnosis of schizophrenia, and they should be recorded only when it is certain that they are present.

Secondary delusions are delusions apparently derived from a preceding morbid experience. The latter may be of several kinds, including hallucinations (e.g. someone who hears voices may believe that he is being followed), low mood (e.g. a profoundly depressed woman may believe people think that she is worthless), or an existing delusion (e.g. a person who is convinced he is being 'framed' may come to believe that he will be imprisoned). 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. Secondary delusions may accumulate until there is a complicated and stable delusional system. When this happens the delusions are said to be *systematized*.

Delusional mood

When a patient first experiences a delusion, he responds emotionally. For example, a person who believes that a group of people intends to kill him is likely to feel afraid. Occasionally, the change of mood precedes the delusion. This preceding mood is often a feeling of foreboding that some, as yet, unidentified sinister event is about to take place. When the delusion follows, it appears to explain this feeling. In German this antecedent mood is called *Wahnstimmung*. This term is usually translated as *delusional mood*, although it is really the mood from which a delusion arises.

Delusional perception

Sometimes the first abnormal experience is the attaching of a new significance to a familiar percept without any reason to do so. For example, the position of a letter that has been left on the patient's desk may be interpreted as a signal that he is to die. This experience is called *delusional perception*. Note, however, that the perception is normal, and it is the delusional interpretation that is abnormal.

Delusional misidentification

This is the delusional misidentification of oneself or of specific other people. Several eponymous forms are

Box 1.3 Descriptions of delusions

According to fixity

- Complete
- Partial

According to onset

- Primary
- Secondary

Other delusional experiences

- Delusional mood
- Delusional perception
- Delusional memory

According to theme

- Persecutory (paranoid)
- Delusions of reference
- Grandiose (expansive)
- Bizarre
- Delusions of guilt
- Nihilistic
- Hypochondriacal
- Religious
- Jealous
- Sexual or amorous
- Delusions of control
- Delusions concerning possession of thought:
 - Thought insertion
 - Thought withdrawal
 - Thought broadcasting

According to other features

- Shared delusions
- Mood congruency

described, and have been considered to be both symptoms and syndromes. In line with the latter view, 'delusional misidentification disorder' is described in Chapter 12.

Delusional memory

In *delusional memory*, a delusional interpretation is attached to past events. Fish (1962) distinguishes two forms of delusional memory. In the commoner form, the past event was genuine, and the term 'delusional' refers to the significance which has now become attached to it. For example, a patient who believes that there is a current plot to poison her may remember (correctly) that she vomited after a meal, eaten long before her psychosis began, and now concludes (incorrectly) that she had been intentionally poisoned. Alternatively, a sudden (autochthonous) delusion arises, which is wrongly dated to a past event. This latter form might be viewed as a true delusional memory (i.e. the memory itself is the delusion), whereas in the first kind described, the memory is normal but a delusional interpretation is placed upon it.

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 à deux* (see page 310). 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 themes

For the purposes of clinical work, it is useful to group delusions according to their main themes, since the themes have some diagnostic significance. However, it is first worth considering the word 'paranoid', which is used widely but not always clearly in this context (see Box 1.4).

Persecutory delusions

These are most commonly concerned with persons or organizations that are thought to be trying to inflict harm on the patient, damage his reputation, or make him insane. Such delusions are common but of little help in diagnosis, because they can occur in delusional disorders, 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, a patient with persecutory delusions characteristically accepts the supposed activities of the persecutors as justified by his own wickedness. In schizophrenia, however, he resents these activities as unwarranted.

Delusions of reference

These are concerned with the idea that objects, events, or people that are unconnected with the patient have a personal significance for him. For example, the patient may believe that an article in a newspaper or a remark on television is directed specifically to him, either as a message to him or to inform others about him. Delusions of reference may also relate to actions or gestures made by other people which are thought to convey a message about the patient. For example, a person who touches his hair may be thought by the patient to be signalling that he, the patient, is turning into a woman. Although most delusions of reference have persecutory associations, some relate to grandiose or reassuring themes.

Delusions of control (passivity phenomena)

A patient who has a delusion of control believes that his actions, impulses, or thoughts are controlled by an outside agency. These are also called *passivity phenomena*. Delusions of control are strongly suggestive of schizophrenia, and have forensic implications, so particular care should be taken when eliciting and recording them. The symptom may be confused with voluntary obedience to commands from hallucinatory voices, with religious beliefs that God controls human actions, or with a metaphorical view of one's free will. By contrast, a patient with a delusion of control firmly believes that his movements or actions are brought about by an outside agency (other than the divine), and are not willed by himself. Moreover, other symptoms of schizophrenia are usually present as well.

Delusions concerning the possession of thought

Healthy people take it for granted that their thoughts are their own. They also know that thoughts are private experiences that become known to other people only if they are spoken aloud, or revealed in writing or through facial expression, gesture, or action. Patients with delusions concerning the possession of thoughts lose these normal convictions in one or more of three ways, all of which are strongly associated with schizophrenia:

- *Thought insertion* is the delusion that certain thoughts are not the patient's own but are implanted by an outside agency. Often there is an associated explanatory delusion—for example, that persecutors have used radio waves to insert the thoughts. This experience must not be confused with that of the obsessional patient, who may be distressed by thoughts that he feels are alien to his nature but who never doubts that these thoughts are his own. The patient with a delusion of thought insertion believes that the thoughts are not his own, but that they have been inserted into his mind.

Box 1.4 The term 'paranoid'

The term 'paranoid' is often used as if it were equivalent to 'persecutory'. Strictly interpreted, however, the word 'paranoid' has a wider meaning (Lewis, 1970). It was used in ancient Greek writings to mean the equivalent of 'out of his mind'. For example, Hippocrates used it to describe patients with febrile delirium. Many later writers applied the term to grandiose, erotic, jealous, and religious delusions, as well as to persecutory delusions. Although for historical reasons it is preferable to retain the broader meaning of the term, the narrower usage is

now more common, as sanctioned in the diagnostic category of paranoid personality disorder (see page 398). Because the term 'paranoid' has two possible meanings, the term 'persecutory' is preferable when the narrow sense of paranoid is required. The issue also affects the use of the word to describe syndromes in which such symptoms predominate; the older term 'paranoid psychoses' (or 'paranoid states') is now replaced by 'delusional disorders', in part to avoid the ambiguities (see also Chapter 12).

- *Thought withdrawal* is the delusion that thoughts have been taken out of the mind. The delusion usually accompanies thought blocking, in which the patient experiences a sudden break in the flow of thoughts and believes that the 'missing' thoughts have been taken away by some outside agency. Often there are associated explanatory delusions comparable to those that accompany delusions of thought insertion (see above).
- *Thought broadcasting* is the delusion that unspoken thoughts are known to other people through radio, telepathy, or in some other way. In addition, some patients believe that their thoughts can be heard out loud by other people, a belief that also accompanies the experience of hearing one's own thoughts spoken (*Gedankenlautwerden*), described above in the section on 'Types of hallucination'.

Grandiose delusions

These are beliefs of exaggerated self-importance. The patient may consider himself to be wealthy, endowed with unusual abilities, or a special person. Such expansive ideas occur particularly in mania, and in schizophrenia.

Bizarre delusions

Delusions with highly improbable content (e.g. of control by aliens who communicate via birds) are said to be *bizarre*. They are often given particular weight in the diagnosis of schizophrenia, but the category has problems of reliability and definition (Bell *et al.*, 2006; Cermolacce *et al.*, 2010), and it is not included in current diagnostic criteria.

Delusions of guilt

These beliefs are found most often in depressive illness, and for this reason are 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 retribution on his family.

Nihilistic delusions

These are beliefs that some person or thing has ceased, or is about to cease, to exist. Examples include a patient's delusion that he has no money, that his career is ruined, or that the world is about to end. Nihilistic delusions are seen in severe depression. Occasionally, nihilistic delusions concern failures of bodily function (often that the bowels are blocked), and are often referred to as *Cotard's syndrome* (see page 196).

Hypochondriacal delusions

These are beliefs concerned with illness. The patient believes, wrongly and in the face of all medical evidence to the contrary, that he is suffering from a disease. Such delusions are more common in the elderly, reflecting the increasing concern with health among people in this age group. Other hypochondriacal delusions are concerned with cancer or venereal disease, or with the appearance of parts of the body, especially the nose. They must be distinguished from the health worries of hypochondriasis (see page 650), which are not delusional.

Mood-congruent and mood-incongruent delusions

If a delusion 'makes sense' in terms of the person's mood, it is said to be mood-congruent. Hypochondriacal and nihilistic delusions in psychotic depression, and grandiose delusions in mania, both fall into this category. In contrast, a delusion that is out of keeping with the prevailing mood is mood-incongruent, and is suggestive of schizophrenia. The concept of congruency can also be applied to hallucinations.

Delusions of jealousy

These are more common among men than women. Not all jealous ideas are delusions; less intense jealous

preoccupations and obsessions are common. Jealous delusions are important because they may lead to aggressive behaviour towards the person(s) who is thought to be unfaithful. A patient with delusional jealousy is not satisfied if he fails to find evidence supporting his beliefs; his search will continue. These important and potentially dangerous problems are discussed further in Chapter 12.

Sexual or amorous delusions

These are rare, and are more frequent in women than in men. Sexual delusions are occasionally secondary to somatic hallucinations felt in the genitalia. A person with amorous delusions believes that she is loved by a man who is usually inaccessible to her, and often of higher social status. In many cases she has never spoken to the person. Erotic delusions are the most prominent feature of De Clérambault's syndrome (see page 308).

Obsessional and compulsive symptoms

Obsessions

Obsessions are recurrent persistent thoughts, impulses, or images that enter the mind despite efforts to exclude them. One characteristic feature is the subjective sense of a struggle—the patient resists the obsession, which nevertheless intrudes into awareness. Another characteristic feature is the conviction that to think something is to make it more likely to happen. Obsessions are recognized by the person as his own and not implanted from elsewhere (in contrast to delusions of thought insertion). Another important distinction from delusions is that obsessions are regarded as untrue or senseless. They are generally about matters that the patient finds distressing or otherwise unpleasant. They are often, but not always, accompanied by compulsions (see page 14).

The presence of resistance is important because, together with the lack of persistent or complete conviction about the truth of the idea, it distinguishes obsessions from delusions. However, in practice this distinction can, in isolation, be more difficult, since the resistance tends to diminish when obsessions have been longstanding. Furthermore, when obsessions are very intense, patients may become less certain that they are false. However, a careful history, not only of the symptom but also of other relevant features (e.g. compulsions, other evidence of psychosis) should avoid diagnostic difficulties. It is also necessary to distinguish clinically significant obsessions from similar thoughts that occur in healthy people, especially when they are tired or under stress. This requires evidence of dysfunction and

persistence. Obsessional symptoms are also a trait in anankastic personality disorder (see page 403).

Obsessions can take various forms (see Box 1.5).

- *Obsessional thoughts* are repeated and intrusive words or phrases that are upsetting to the patient—for example, repeated obscenities or blasphemous phrases coming into the awareness of a religious person.
- *Obsessional ruminations* are repeated worrying themes of a more complex kind—for example, about the ending of the world.
- *Obsessional doubts* are repeated themes expressing uncertainty about previous actions—for example, 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 degree of uncertainty and consequent distress is unreasonable.
- *Obsessional impulses* are repeated urges to carry out actions, usually ones that are aggressive, dangerous, or socially embarrassing—for example, the urge to pick up a knife and stab another person, to jump in front of a train, or 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*. This term denotes an obsessional symptom associated with avoidance as well as anxiety—for example, the obsessional impulse to injure another person with a knife may lead to consequent avoidance of knives. Sometimes obsessional fears of illness are called *illness phobias*.
- *Obsessional slowness*. Many obsessional patients perform actions slowly because their compulsive rituals or repeated doubts take time and distract them from their main purpose. Occasionally, however, the slowness does not seem to be secondary to these other problems, but appears to be a primary feature of unknown origin.

Box 1.5 Obsessional and compulsive symptoms

Obsessions
Thoughts
Ruminations
Doubts
Impulses
Obsessional phobias
Compulsions (rituals)
Obsessional slowness

Although the content (or themes) of obsessions are various, most of them can be grouped into one or other of six categories:

- dirt and contamination
- aggression
- orderliness
- illness
- sex
- religion.

Thoughts about *dirt and contamination* are usually associated with the idea of harm to others or self 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—for example, a dread of cancer. Obsessional ideas about *sex* usually concern practices that the individual would find shameful. Obsessions about *religion* often take the form of doubts about the fundamentals of belief (e.g. ‘does God exist?’) or repeated doubts about whether sins have been adequately confessed (‘scruples’).

Compulsions

Compulsions are repetitive and seemingly purposeful behaviours that are performed in a stereotyped way (hence the alternative name, ‘compulsive rituals’) in response to an obsession. They are accompanied by a subjective sense that the behaviour must be carried out and by an urge to resist it. The compulsion usually makes sense given the content of the obsession. For example, a compulsion to wash the hands repeatedly is usually driven by obsessional thoughts that the hands are contaminated. Sometimes obsessional ideas concern the consequences of failing to carry out the compulsion in the ‘correct’ way—for example, that another person will suffer an accident. Compulsions may cause problems for several reasons.

- They may cause direct harm (e.g. dermatitis from excessive washing).
- They may interfere with normal life because of the time they require.
- Although the compulsive act transiently reduces the anxiety associated with the obsession, in fact the compulsions help to maintain the condition. Strategies to reduce them are central to behavioural treatments of obsessive–compulsive disorder.

There are many kinds of compulsive acts, but four types are particularly common.

- *Checking rituals* are often concerned with safety—for example, checking over and over again that the fire has been turned off, or that the doors have been locked.
- *Cleaning rituals* often take the form of repeated hand washing, but may involve household cleaning.
- *Counting rituals* usually involve counting in some special way—for example, in threes—and are frequently associated with doubting thoughts such that the count must be repeated to make sure that it was carried out adequately in the first place. The counting is often silent, so an onlooker may be unaware of the ritual.
- In *dressing rituals* the person lays out clothes, or puts them on, in a particular way or order. The ritual is often accompanied by doubting thoughts that lead to seemingly endless repetition.

Overvalued ideas

Overvalued ideas were first described by Wernicke in 1900, and were reviewed by McKenna (1984). An overvalued idea is a comprehensible and understandable idea which is pursued beyond the bounds of reason. It may preoccupy and dominate a person’s life for many years, and affect their actions. It therefore shares some characteristics of delusions. However, it is essential to distinguish the two types of belief, as their diagnostic implications are very different. Overvalued ideas differ from delusions in two main ways.

- The content of, and basis for, the overvalued idea is usually understandable when the person’s background is known, whereas delusions and the person’s explanation of them tend to be bizarre. For example, a person whose mother and sister suffered from cancer one after the other may understandably become convinced that cancer is contagious.
- The theme also tends to be culturally common and acceptable, as in the overvalued ideas about body shape that characterize anorexia nervosa.

With an overvalued idea, there is a small degree of insight and willingness to at least entertain alternative views, even though this is not persistent and the patient always returns to and retains the belief.

Overvalued ideas must also be distinguished from obsessions. This is usually easier than the distinction from delusions, since there is no sense of intrusiveness or senselessness of the thought, nor is there resistance to it. Overvalued ideas differ from normal religious beliefs in that the latter are shared by a wider group, arise from religious instruction, and are subject to periodic doubts. Despite these differences, it can on occasion be difficult to recognize an overvalued idea and distinguish

it unequivocally from a delusion, obsession, or normal belief. However, this should rarely lead to practical problems, because diagnosis depends on more than the presence or absence of a single symptom.

The beliefs concerning body shape and weight that are held in anorexia nervosa are perhaps the clearest example of overvalued ideas. According to McKenna (1984), the term also applies to abnormal beliefs in many other conditions, including dysmorphophobia, hypochondriasis, paranoid personality disorder, and morbid jealousy. However, it is important to emphasize that overvalued ideas are defined by their form, not their content, and they have no inviolable relationship with, or implication for, any particular diagnostic category. Thus some cases of morbid jealousy are clearly delusional, whereas in hypochondriasis or dysmorphophobia the belief often has the character of an obsession or a worry, not of an overvalued idea.

Disturbances of thinking processes

Disturbances of the stream of thought

In disturbances of the stream of thought, the amount and speed of thinking are changed. In *pressure of thought*, ideas arise in unusual variety and abundance and pass through the mind rapidly. In *poverty of thought*, the patient has few thoughts, and these lack variety and richness and seem to move slowly through the mind. Pressure of thought occurs in mania; poverty of thought occurs in depressive disorders. Either may be experienced in schizophrenia. Given that the phenomena are recognized through the person's use of language, they are also known as *pressure of speech* or *poverty of speech*.

Thought block

Sometimes the stream of thought is interrupted suddenly. The patient feels that his mind has gone blank, and an observer notices a sudden interruption in the patient's speech. In a minor degree this experience is common, particularly when a person is tired, anxious, or distracted. In thought blocking, the interruptions are sudden, striking, and repeated, and are experienced by the patient as an abrupt and complete emptying of his mind. Thought blocking is an important symptom, as it strongly suggests schizophrenia. The diagnostic association with schizophrenia is stronger when the patient interprets the experience in an unusual way—for example, when he says that another person has removed his thoughts.

Disorders of the form of thought

Disorder of the form of thought (also known as *formal thought disorder*) is usually recognized from speech and writing, but is sometimes evident from the patient's behaviour—for example, he may be unable to file papers under appropriate category headings. Disorders of the form of thought can be divided into several kinds, as described below. Each kind has associations with a particular mental disorder, but none of the associations is strong enough to be diagnostic.

Perseveration

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 question, but continue to give the same answer inappropriately to subsequent questions. Perseveration occurs in, but is not limited to, dementia and frontal lobe injury.

Flight of ideas

In flight of ideas, thoughts and speech move quickly from one topic to another so that one train of thought is not carried to completion before another takes its place. The normal logical sequence of ideas is generally preserved, although ideas may be linked by distracting cues in the surroundings and by distractions arising from the words that have been spoken. These verbal distractions are of three kinds, namely *clang associations* (a second word with a sound similar to the first), *puns* (a second meaning of the first word), and *rhymes*. In practice, it is difficult to distinguish between flight of ideas and loosening of associations (see below), especially when the patient speaks rapidly. When this happens it is often helpful to record a sample of speech. Flight of ideas is characteristic of mania.

Loosening of associations

This denotes a loss of the normal structure of thinking. To the interviewer the patient's discourse seems muddled, illogical, or tangential to the matter in hand. It does not become clearer when the patient is questioned further; indeed, the interviewer has the experience that the more he tries to clarify the patient's thinking (or the longer he allows the patient to speak without interruption), the less he understands it. Several specific features of this muddled thinking have been described, but they are difficult to identify with certainty, and the most striking clinical impression is often a general lack of clarity, best described by recording an example of the speech and the impression made on the interviewer. This lack

of clarity 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, and people with low intelligence usually express their ideas more clearly when the interviewer simplifies the questions and allows more time for the reply.

Three characteristic kinds of loosening of associations have been described, all of which are seen most often in schizophrenia.

- In *talking past the point* (*Vorbeireden*) the patient seems always about to get to the endpoint of the topic in question, but then skirts round it and never in fact reaches it.
- *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 associations described above under flight of ideas.
- *Verbigeration* is said to be present when speech is reduced to the senseless repetition of sounds, words, or phrases. This abnormality can occur with severe expressive aphasia and occasionally in schizophrenia. When this abnormality is extreme, the disorder is called *word salad*.

Other disorders of thinking

Overinclusion refers to a widening of the boundaries of concepts, such that things are grouped together which are not normally regarded as closely connected.

Neologisms are words or phrases invented by the patient, often to describe a morbid experience. 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' that some families invent for their own use. Before deciding that a word is a neologism, the interviewer should ask the patient what he means by it. Neologisms occur most often in chronic schizophrenia.

Depersonalization and derealization

Depersonalization is a change of self-awareness such that the person feels unreal, detached from his own experience, and unable to feel emotion (Sierra and David, 2011). *Derealization* is a similar change in relation to the environment, such that 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, including changes in the experience of time, changes in the body image (e.g. 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.

Because patients find it difficult to describe the feelings of depersonalization and derealization, they often resort to metaphor, and this can lead to confusion between depersonalization and delusional ideas. For example, a patient may say that he feels 'as if part of my brain had stopped working', or 'as if the people I meet are lifeless creatures'. Sometimes careful questioning is required to make the distinction; the 'as if' quality is a useful discriminator.

Depersonalization and derealization are experienced quite commonly by healthy people—especially when they are tired—as transient phenomena of abrupt onset (Sedman, 1970). The symptoms have been reported after sleep deprivation and sensory deprivation, and as an effect of hallucinogenic drugs. They occur in anxiety disorders, post-traumatic stress disorder, depressive disorders, schizophrenia, and temporal lobe epilepsy. There is also a rarely used diagnostic category of depersonalization–derealization syndrome.

Motor symptoms and signs

Abnormalities of social behaviour, facial expression, and posture occur frequently in mental disorders of all kinds; motor symptoms and signs can also be side effects of medication. They are considered in Chapter 3, where the examination of the patient is described. Motor slowing and agitation, which are important features of depressive disorder, are discussed in Chapter 9. With the exception of tics, the specific symptoms listed here are mainly observed in schizophrenia, particularly catatonic schizophrenia (see page 256).

- *Tics* are irregular repeated movements involving a group of muscles—for example, sideways movement of the head or the raising of one shoulder.
- *Mannerisms* are repeated movements that appear to have some functional significance—for example, saluting.
- *Stereotypies* are repeated movements that are regular (unlike tics) and without obvious significance (unlike mannerisms)—for example, rocking to and fro.
- *Catatonia* is a state of increased muscle tone that affects extension and flexion and is abolished by voluntary movement.

- *Catalepsy* (*waxy flexibility*, *flexibilitas cerea*) is a term used to describe the tonus in catatonia. It is detected when a patient's limbs can be placed in a position in which they then remain for long periods while at the same time muscle tone is uniformly increased. Patients with this abnormality sometimes maintain the head a little way above the pillow in a position that a healthy person could not maintain without extreme discomfort (*psychological pillow*). Catalepsy should not be confused with *cataplexy* (see page 327).
- *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 (for example, standing on one leg).
- *Grimacing* has the same meaning as in everyday speech. The term *Schnauzkrampf* (snout cramp or spasm) denotes pouting of the lips to bring them closer to the nose.
- *Negativism*. 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* occurs when the patient imitates the interviewer's movement automatically, even when asked not to do so.
- *Mitgehen* (going along with) describes another kind of excessive compliance in which the patient's limbs can be moved into any position with the slightest pressure.
- *Ambitendence*. Patients are said to exhibit ambitendence when they alternate between opposite movements—for example, putting out the arm to shake hands, then withdrawing it, extending it again, and so on repeatedly.

Disturbances of the body image

The body image or body schema is a person's subjective representation against which the integrity of their body is judged and the movement and positioning of its parts assessed. Specific abnormalities of the body image arise in neurological disorders. These abnormalities include the awareness of a *phantom limb* after amputation, *unilateral lack of awareness or neglect* (usually following stroke), *hemiasomatognosia* (in which the person feels, incorrectly, that a limb is missing), and *anosognosia* (lack of awareness of loss of function, often of hemiplegia). These abnormalities are described in textbooks of neurology and in David *et al.* (2009a).

Distorted awareness of size and shape of the body occurs occasionally in healthy people when they are tired or falling asleep. The experience, which includes feelings that a limb is enlarging, becoming smaller, or otherwise being distorted, also occurs in migraine, as part of the aura of epilepsy, and after taking LSD. The person is aware that the experience is unreal. However, changes in the shape and size of body parts are described by some schizophrenic patients, and in this instance the symptoms are delusional or hallucinatory and there is no insight. *Coenestopathic states* are localized distortions of body awareness—for example, when the nose feels as if it is made of cotton wool.

A *general distortion of the body image* occurs in anorexia nervosa, where the patient is convinced that they are fat when in fact they are underweight, sometimes to the point of emaciation.

The *reduplication phenomenon* is the experience that the body has doubled, or that part of the body has done so—for example, that there are two left arms. The experience is reported very occasionally in migraine, temporal lobe epilepsy, and schizophrenia. The related experience of *autoscopie hallucinations* was described on page 7.

Disturbances of the self

The experience of self has several aspects. It is more than the awareness of the body; we have a feeling of unity between the various aspects of the self, we recognize our activities as our own, we recognize a boundary between the self and the outside world, and we have a feeling of continuity between our past and present selves. The concept of self is closely related to, but distinct from, that of the *body image*. Although the body image is usually experienced as part of the self, it can also be experienced in a more objective way, as when we say 'my leg hurts'. Some of these aspects of the self are changed in certain psychiatric disorders. The experiences are often associated with other abnormal phenomena, so that the account of abnormalities of the self overlaps with several other parts of this chapter.

Disturbances concerned with activities

We take it for granted that, other than in a metaphorical or religious sense, our actions are our own. Patients with delusions of control (see page 11) lose this awareness. They have the experience that thoughts are not their own and believe instead that these have been inserted from outside. Some patients lose the conviction that their actions are their own, and believe instead that they have been imposed by an outside agency.

Disturbed awareness of the unity of the self

Some patients lose the normal experience of existing as a unified being. Patients with *dissociative identity disorder* (see page 655) have the experience of existing as two or more selves, alternating at different times. In the experience of *autoscopy* and the related experience of the *Doppelgänger* (see page 7), the person experiences two selves, present at the same time, but with the conviction that each is a version of the self.

Disturbances of the unity of the self

Although we recognize that we change over time, we retain a conviction of being the same person. Rarely, this feeling of continuity is lost in schizophrenia. For example, a patient may say that he is a different person from the one who existed before the disorder began, or that a new self has taken over from the old one.

Disturbances of the boundaries of the self

This type of disorder is experienced by some people after taking LSD or other drugs, who may report that they felt as if they were dissolving. Hallucinations can be regarded as involving a loss of awareness of what is within the self and what is located outside. The same inability to determine what is part of the self, and what is not, is seen in passivity phenomena, in which actions willed by the patient are experienced as initiated from outside.

Disturbances of memory

The features of memory disturbance and its assessment are discussed in detail in Chapters 3 and 14. In this chapter we introduce some key terms and concepts.

Failure of memory is called *amnesia*. The related term *dysmnnesia* is occasionally used. *Paramnesia* is distortion of memory. Several kinds of disturbed memory occur in psychiatric disorders, and it is usual to describe them in terms of the temporal stages that approximate crudely to the scheme of memory derived from psychological research. A discussion of this subject can be found in textbooks of neuropsychology or in David *et al.* (2009a,b).

- *Immediate memory* concerns the retention of information over a short period, measured in minutes. It is tested clinically by asking the patient to remember a novel name and address and to recall it about 5 minutes later.
- *Recent memory* concerns events that have taken place in the past few days. It is tested clinically by asking about events in the patient's daily life which

are known also to the interviewer directly or via an informant (for example, what the patient has eaten) or in the wider environment (for example, well-known news items).

- *Long-term (remote) memory* concerns events that have occurred over longer periods of time. It is tested by asking about events before the presumed onset of memory disorder.

When testing any state of memory, a distinction is made between spontaneous *recall* and *recognition* of information. In some conditions, patients who cannot recall information can recognize it correctly.

Memory loss most commonly occurs in dementia and delirium. It usually affects recall of recent events more than recall of distant ones. In dementia, it usually progresses with time and becomes severe, but is rarely total. Some organic conditions give rise to an interesting partial effect known as *amnestic disorder*, in which the person is unable to remember events that occurred a few minutes earlier, but can recall remote events (see page 354). Total loss of all memory, or selective loss of personal identity, strongly suggests psychogenic causes (see below) or malingering. Some patients with memory disorder recall more when given cues. When this happens, it suggests that the disorder is concerned at least in part with retrieval.

After a period of unconsciousness, memory is impaired 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 electroconvulsive therapy) also lead to inability to recall events before the onset of unconsciousness (*retrograde amnesia*).

Disturbances of recognition

Several *disorders of recognition* occur occasionally in neurological and psychiatric disorders.

- *Jamais vu* is the failure to recognize events that have been encountered before.
- *Déjà vu* is the conviction that an event is repeating one that has been experienced in the past, when in fact it is novel.
- *Confabulation* is the confident recounting of quite false 'memories' for recent events, and is characteristic of amnestic syndrome. For example, a patient with no memory of what they ate for breakfast may confabulate a completely incorrect menu. This is done in a plausible manner without any apparent difficulty, and without any awareness of the falsity of the information.

Recall of events can be biased by the mood at the time of recall. Importantly, in depressive disorders, memories of unhappy events are recalled more readily than other events, a process which adds to the patient's low mood.

Psychogenic amnesia

This is thought to result from an active process of repression which prevents the recall of memories that would otherwise evoke unpleasant emotions. The ideas arose from the study of *dissociative amnesia* (see page 654), but the same factors may play a part in some cases of organic amnesia, helping to explain why the return of some memories is delayed longer than that of others.

False memory syndrome

It is a matter of dispute whether memories can be repressed completely but return many years later. The question arises most often when memories of sexual abuse are reported during psychotherapy by a person who had no recollection of the events before the psychotherapy began, and the events are strongly denied by the alleged abusers. Many clinicians consider that these recollections have been 'implanted' by overzealous questioning, while others contend that they are true memories that have previously been completely repressed. Those who hold the latter opinion point to evidence that memories of events other than child abuse can sometimes be completely lost and then regained, and also that some recovered memories of child abuse are corroborated subsequently by independent evidence (for review, see Brewin, 2000). Although the quality of the evidence has been questioned, the possibility of complete and sustained repression of memories has not been ruled out. However, it seems likely that only a small minority of cases of 'recovered memory syndrome' can be explained in this way.

Disturbances 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, as does stupor.

- *Coma* is the most extreme form of impaired consciousness. 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.

- *Clouding of consciousness* refers to a state that ranges from barely perceptible impairment to definite drowsiness in which the person reacts incompletely to stimuli. Attention, concentration, and memory are impaired to varying degrees, and orientation is disturbed. Thinking appears to be muddled, and events may be interpreted inaccurately. Clouding of consciousness is a defining feature of delirium.
- *Stupor*, in the sense used in psychiatry, refers to a condition in which the patient is immobile, mute, and unresponsive, but appears to be fully conscious in that the eyes are usually 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. Stupor may occur in catatonia (see page 16). Note that in neurology the term 'stupor' is used differently and generally implies an impairment of consciousness.
- *Confusion* means an inability to think clearly. It occurs characteristically in states of impaired consciousness, but it can occur when consciousness is normal. In delirium, confusion occurs together with partial impairment (clouding) of consciousness, along with other features. In the past, delirium was called a confusional state, with the result that the term 'confusion' was used to mean impairment of consciousness as well as muddled thinking.

Other terms that are used to describe states of impaired consciousness include the following:

- *oneiroid states*, in which there is dream-like imagery although the person is not asleep; if prolonged, this may be called a *twilight state*
- *torpor*, in which the patient appears drowsy, readily falls asleep, and shows evidence of slow thinking and narrowed range of perception.

In addition, there are sleep-wake disorders that can present with impaired consciousness, such as narcolepsy, in which there are often recurrent, sudden, brief collapses owing to loss of muscle tone (*cataplexy*).

Disturbances of attention and concentration

Attention is the ability to focus on the matter in hand. *Concentration* is the ability to maintain that focus. The ability to focus on a selected part of the information reaching the brain is important in many everyday situations—for example, when conversing in a noisy place. It is also important to be able to attend to more

than one source of information at the same time—for example, when conversing while driving a car.

Attention and concentration 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 patients' ability to give or receive information when interviewed, and can interfere with a patient's ability to work, drive a car, or take part in leisure activities.

Insight

In psychopathology, the term *insight* refers to awareness of morbid change in oneself and a correct attitude to this change, including, in appropriate cases, a realization that it signifies a mental disorder. This awareness is difficult for a patient to achieve, since it involves some knowledge of what are the limits of normal mental functioning and mental experience. Furthermore, insight has to be assessed against the background of knowledge and beliefs about psychiatric disorder—it is not the same as complete agreement with the views of the doctor. Insight is also influenced by cultural and cognitive factors (Saravanan *et al.*, 2004; Nair *et al.*, 2014).

Although, in the past, lack of insight was said to be a feature that distinguishes between psychosis (where it was said to be absent) and neurosis (where it is present), this distinction is no longer thought to be reliable or useful. The 'lack of insight' in psychosis is better

conceptualized in terms of 'impaired reality testing' or 'reality distortion' (see Chapter 11).

Insight is not simply present or absent. It has several facets, each being a matter of degree.

- Is the patient aware of phenomena that others have observed (e.g. that he is unusually active and elated)?
- If so, does he recognize the phenomena as abnormal (rather than, for example, maintaining that his unusual activity and cheerfulness are due to normal high spirits)?
- If so, does he consider that the phenomena are caused by mental illness (as opposed to, say, a physical illness or poison administered by enemies)?
- If so, does he think that he needs treatment?

The answers to these questions are more informative and more reliable than those of the single question as to whether insight is present or not. The value of determining the degree of insight is that it helps to predict whether the patient is likely to accept the need for help and treatment.

In discussions of psychotherapy, insight has a different meaning from that considered so far which is used in general psychiatry. In psychotherapy, insight is the capacity to understand one's own motives and to be aware of previously unconscious aspects of mental activity. The term *intellectual insight* is sometimes used to denote the capacity to formulate this understanding, whereas the term *emotional insight* refers to the capacity to feel and respond to the understanding.

For review of insight, see Landi *et al.* (2016).

Further reading

Berrios GE (1996). *The History of Mental Symptoms*. Cambridge University Press, Cambridge. (A fascinating history of descriptive psychopathology.)

Jaspers K (1963). *General Psychopathology* (translated from the 7th German edition by J Hoenig and MW Hamilton). Manchester

University Press, Manchester. (The classic work on the subject. Chapter 1 is particularly valuable.)

Oyebode F (2014). *Sims' Symptoms in the Mind: an introduction to descriptive psychopathology*, 5th edn. Saunders, London. (A comprehensive and readable modern text.)