Reading

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SURVIVAL AND BEREAVEMENT

Disasters strike with sudden violence, tearing bodies, lives and families apart. Yet, sitting at home in the UK, witnessing natural cataclysms such as earthquakes through the eye of the television camera, there may be little sense of reality – such things simply do not happen to *us*. A tragedy nearer to home, such as an air crash, happens so rarely that potential disaster can still be dismissed as a threat with little substance.

Catastrophes such as the crash of the Pan Am jet onto the Scottish town of Lockerbie in 1988 concentrate the minds of those who think, 'It won't happen to us, it always happens to someone else'. Who could have been less vulnerable to being literally wiped off the face of the earth than someone lying in bed, or watching television in the comfort of their sitting room? Technological disasters, experienced with increasing frequency, seem to have a particular ferocity of suddenness and violence, and kindle powerful emotions of anger and blame. After one catastrophe a newspaper cartoon depicted a tombstone inscribed with the legend, 'This will never happen again', reminding us that technological disasters will always occur, because we are human and we make mistakes.

Disaster survivors are ordinary people – the only thing that distinguishes them from the reader of this book is that *they* happened to be in the wrong place at the wrong time. Their very ordinariness presents helpers with new challenges in terms of the organisation of services, and with an old problem, perhaps the central problem of existence – loss.

Psychological reactions to disaster, complex as they are, can be understood essentially as the reactions of normal human beings to sudden, unexpected and terrifying events in their lives. In disasters, people lose loved ones, relatives and property. Above all, in psychological terms, they lose faith – not religious faith, but faith in the fact that life has a certain consistency and meaning. The fabric of everyday existence is torn away to reveal danger and risk. For the survivor, the encounter inevitably involves a corruption of innocence. Once something of this nature has happened to a person, it is very difficult for them to believe that life can ever be the same again; that they can let their children walk across the street; or that they can safely

go to bed at night. It is also difficult for them to avoid thinking not only that something else terrible may happen, but that in some way they have been singled out, or even that 'if such a terrible thing can have happened to me then I must have done something to deserve it'.

What is survival? Survival is not just the difference between living and dying – survival is to do with quality of life. Survival involves progressing from the event and its aftermath, and transforming the experience. The difficulty of 'moving on' is described best by the words of survivors themselves. One young woman who survived the 1987 Zeebrugge disaster wrote the following some ten months after the tragedy:

> I have had what can only be described as a weird year. Firstly, I became engaged, then John and I were survivors of the 'Herald'. Soon afterwards, John's job took him away and I was left to recover from my injuries and to come to terms with what I had been convinced was my death as I happened to be under water and would still be there if John had not come back for me. I tried to get back to work, but it was impossible, and I failed. Soon after the wedding John was away again, but I was so busy I had no time to even take breath – at Christmas we never seemed to be in. Now it's all over there are no plans to be made, only time to reflect. I am not complaining – we have been so very lucky and are very happy. But now it's beginning to hit home. I seem to be spending more time thinking about what happened and crying about it a lot more than I have done. I am not unhappy or depressed, just still trying to sort out what happened and why we have been so lucky.

A bereaved relative who was not on board that night described her reactions during the first year:

> I just feel that nobody can help me. I have been suffering from panic attacks and I hardly go shopping any more – I am frightened to drive and cannot even get in the bath without anybody in the house. I and my brother had a terrible fear of boats when we were very young, and I was thinking of him and his wife all day. The news-flash that night will live with me for the rest of my life. I feel so guilty for being like I am – hurt, miserable, angry and bitter, for they are the ones who suffered that night. They were so loving, so caring – everything a brother and sister-in-law should be – I couldn't have wished for better. They were my life, always there when I needed them, and now I feel so lost.

In this first chapter we will recount the many aspects of the emotions, thoughts and behaviours of those who survive disaster and are bereaved.

Knowledge of this provides the map of the territory that the survivor and helper will have to explore.

SURVIVAL

Trauma is not an invention of the twentieth century. Homer's *Iliad* contains much that is instructive about combat stress (283). Samuel Pepys' diary gives descriptions of post-traumatic stress in survivors of the 1666 Fire of London (59). The First World War saw the phenomenon of 'shell shock'. The concept of post-traumatic stress appears, disappears and reappears in various guises over the centuries.

Detailed exploration of the experience of survival developed following the terrible episodes of the Second World War such as the dropping of the atom bomb and the Holocaust. An American psychiatrist, Robert Jay Lifton, arrived in Hiroshima in 1962. His observations on survival, even though they are descriptive rather than explanatory, hold good today (188). Five central experiences borne by survivors are described.

The death imprint

The 'death imprint' consists of indelible imagery of the encounter with death, intruding whilst awake, or during sleep in the form of nightmares. It comprises a condensation of the experience – images of the impact such as the sight of bodies dismembered or crushed, the sounds of screaming, or the smell of burning flesh. No details are spared the survivor who may appear to have a 'spellbound fascination' with the events.

The way in which everyday experiences can trigger these images or flashbacks is described in those who experienced Nazi concentration camps.

> Associations . . . can occur in any connection whatsoever, from seeing a person stretching his arms and associating this with fellow prisoners hung up by their arms under torture, to seeing an avenue of trees and visualising long rows of gallows with swinging corpses. Children playing peacefully may suddenly, without any apparent cause, call to mind other children, emaciated, tortured, murdered (78).

A survivor of the 1988 Piper Alpha Oil Platform explosion (247) wrote the following vivid account of how a television programme was the trigger for a flashback experience:

> I was idly watching television. Suddenly, with a vivid jolt, I was back on Piper, experiencing the intensity of those first moments after the initial explosion. The television programme I was watching

dealt with the Korean War and a cameraman had captured the moments immediately after the explosion of a terrorist bomb. Debris was still falling from the surrounding buildings. People were rushing around, preoccupied and intense. Many were injured. Blood streamed down their shocked, bemused faces . . . .

There was no terror. People moved around me on the 64-foot level, actively if anxiously. An injured man was being carried down the metal stairs. I rushed to the compressor and tried to find a way of switching it off. Davey Elliot came to help me, blood still oozing down his face.

Yet around me, sitting there at home, were the noises of everyday life – Suzie playing happily with her toys on the carpet, cars speeding past the window, cups rattling in the kitchen, the cat purring on my lap.

Survivor guilt

Survivor guilt, where the person questions why they survived when others did not, can be of two sorts. Firstly, there is what might be called 'existential guilt'. Here the person dwells in a very general way on their survival – 'Why me?', or 'Why did God choose me?'; or perhaps, 'Why me when I am old and so many children died?' Secondly, guilt may be focused on actions or their absence – 'Did I do enough, could I have saved more people?' Guilt may be especially intense when parents survive their children, or where there is competition for survival.

One survivor of the Zeebrugge disaster was a lorry driver who was on the ferry's vehicle deck when the ship capsized. His lorry ended up in the middle of a stack of articulated vehicles balanced on their sides. Frozen with fear, he heard his vehicle groaning under the weight of two lorries above, and knew that he would die. He then remembered that his trailer was a refrigerated container and hence was strengthened – he had a little time before he was crushed. He smashed his suitcase through the window, climbed over the bonnet of his truck and into the water, which now flooded half of the hold. He swam towards the exit, but as he did, he heard the screams of trapped lorry drivers – 'God help us, Christ help us, God help us'. He swam on, climbed out onto the side of the ship, and was one of the first to smash portholes, let down hawsers into the ship and begin the rescue. Several hours later he was removed to a tug, frozen with cold, his hands lacerated. He could have humanly done no more than he did, yet he did not remember these actions – only the unanswered screams of the trapped men in the hold from which he escaped. 'They were drivers, like me, and I did nothing to help them'. Three years later he committed suicide. Crew members of the *Herald of Free Enterprise* who swapped shifts with colleagues, putting them in their place on the night in question,

felt an intense sense of guilt, even though shift swaps were a normal part of their work routine.

Guilt presupposes the presence of choice and the power to exercise it, which in reality during the impact may not have been possible. The experience of guilt may be an unconscious attempt to deny or undo this sense of helplessness (60). Guilt may also be based on a revised view of oneself. Thus many parents believe that if the choice was between their child's life or their own, then they would sacrifice themselves. In the impact of disaster, however, parents may forget that they have children. One mother fled the burning spectators' stand at Bradford without thinking that her son had been with her. She never disclosed this in counselling, choosing rather to make a public breast of it on national television three years later.

'Animating guilt' and 'static guilt' represent two different entities (188). Animating guilt is a spur to self-examination which can allow guilt to move 'towards the anxiety of responsibility'. Static guilt keeps the victim bound to the experience, unable to move on. The task of the helper may be to assist the survivor to progress from static to animating guilt 'and then from guilt to responsibility and some behaviour which alleviates the guilt'.

In survivors of the Nazi concentration camps, it has been suggested (69) that the chronicity of survivor guilt may have a symbolic function, 'a kind of testimonial. By continuing to suffer himself, the survivor seems to be trying to provide an enduring memorial to his slaughtered friends and relatives.' It is therefore a mechanism of expressing loyalty. Recovering from the effects of persecution would mean betraying the dead and perhaps forgiving the persecutors. There may also be an aspect of atonement – survivors may have to face the recognition that they come from the same population, the human race, as those who have committed atrocities against them.

This last point is important for those who approach the experience of survival from the standpoint of psychodynamic thinking, taking into account unconscious and repressed feelings. Individuals have aggressive, even destructive and murderous, feelings, which are repressed rather than acknowledged. Following disaster, the guilt experienced may be partly connected to a deep awareness of these feelings, and in particular to a sense that one's own past aggressive feelings, either to loved ones or to others, were in some way implicated in their destruction.

In considering the allied concept of self-blame, two distinct types can be identified (151). 'Behavioural self-blame' involves blaming one's own behaviour, and is adaptive, whereas 'characterological self-blame' involves reflections about one's personality characteristics and is maladaptive, associated with depression.

> Thus, the rape victim who believes she should not have hitchhiked or should not have walked alone is engaging in behavioural self-blame, whereas the rape victim who believes she is

a bad person or a poor judge of character is engaging in characterological self-blame.

Behaviours are potentially modifiable, 'personality characteristics' may not be. If a behaviour is changeable, then the catastrophe may be avoided in the future, and hence behavioural self-blame raises the possibility of hope. A study of combat veterans (173) demonstrated a type of characterological self-blame, 'I should have known better' guilt, reflecting the cognitive distortion of hindsight bias ('I *should* have known better' leading to the false premise of 'I *could* have known better'). Again, this should be amenable to cognitive therapy.

In survivors of terrorist attacks, survivor guilt was present in 7 per cent of those with post-traumatic stress disorder and in just over 1 per cent of those without (193). Of the survivors of a building collapse, 44 per cent experienced guilt; 15 per cent gave no reason, 33 per cent 'wanted to have done more to relieve pain and suffering or death' including several individuals pinned under rubble who had tried to console those who were near them and more frightened or hurt more seriously: 'They had been upset when fellow victims, some of whom they never saw, fell silent; they assumed they were dead'. Fifteen per cent felt guilty because they had not stayed to help and 27 cent experienced guilt because they felt fortunate in being alive (340).

In a group of survivors of the 1987 Zeebrugge disaster (157), assessed at thirty months post disaster, survivor guilt was present in 60 per cent. Guilt about things not done was twice as common as guilt about things done, and it was more common to experience guilt or shame about letting others down than letting oneself down. Feelings of guilt were associated with greater general psychological distress. Guilt about things one failed to do was associated with mental intrusion rather than avoidance, whereas guilt about things one did was related to avoidance but not intrusion. The two types of guilt may reflect different attributional patterns, or may be directly related to the type of symptom. For example, guilt about things done may be more distressing, and therefore avoidance is used in an attempt to filter it out. There is evidence (29) that people who blame themselves are more likely to withdraw socially and less likely to use coping strategies involving other people. Whilst self-blame predicts poor outcome, external blame does not (293).

Another allied experience is that of shame. Survivors may feel ashamed about remaining alive, or about the way they handle their feelings. The blocking of feelings (the psychic numbing described below) may play a role in the development of feelings of shame (183). The survivor may become ashamed of what may have seemed to be callousness in the eyes of others.

Communities may compound the sense of shame by shunning survivors. Some survivors of the Bradford fire described how people who knew them would cross the street rather than have to speak to them. Parents bereaved of young children often experience this shunning as meaning that they carry a

threat to other parents. The loss of status and ability contributes further to the sense of shame. Survivors of the atomic bombings in Japan, the *hibakusha* ('explosion-affected persons'), received little or no official recognition of their suffering for many years, becoming a 'stigmatised and forsaken group' (312). They were discriminated against in marriage and employment, even by other survivors who bore no visible evidence in the shape of scars to indicate that they too had passed through the same experience. In a study of Vietnam war veterans (348), those with PTSD scored highest on a measure of shame, as well as two subfactors of shame, alienation and inferiority. Shame was strongly linked to depression.

Psychic numbing

Numbing is a defensive manoeuvre, preventing survivors from experiencing the reality of the catastrophic destruction and death about them, and the massive personal threat implied. It blocks the experience of too much unbearable pain at any one time, and its first manifestations are present in the so-called 'disaster syndrome', where immediately following the impact, survivors may be stunned and dazed. Observers may think the survivors are behaving remarkably calmly. They may seem to be in control and coping bravely – in fact, they have not yet begun to react. They are behaving as though they are calm observers of someone else's experience (138).

Defences of repression, denial and isolation are natural and necessary in the short term. For some they may be retained to allow certain painful tasks to proceed. Thus after the Zeebrugge disaster, senior seamen performed such tasks as working in the mortuary identifying dead colleagues. Whilst doing this they remained distanced from their feelings, drinking heavily and joking. It was at least six months before they could talk about these experiences.

One victim of several armed robberies remarked, 'It's like I'm on drugs – I feel disconnected, as if there is a veil between me and everyone else'. For many survivors, these defences give way to a more open expression of feelings, but for some they may persist, leaving the survivor emotionally 'living dead', as with the so-called *Musselmänner* of Auschwitz. Such a state does not equate with survival.

Nurturance conflicts

This conflict refers to the suspicion of offers of help from outsiders and in particular to the experience of distrust, the fear that such offers may be false. Survivors may become 'touchy and sensitive to the responses of others' and develop 'a form of severe victim-consciousness' (258) which sometimes reaches the level of paranoia. One survivor of the Bradford fire appeared to cope well in the first weeks following his discharge from hospital. He

socialised in his local club and was regularly seen out walking and shopping. All of a sudden, this stopped. He refused to leave his own home and his partner sought help. He had, he said, grown tired of being asked to recount the story of his escape from the inferno. At first, people were naturally inquisitive. Then it seemed to him they were accusing him of some impropriety in the manner of his escape.

Survivors may become very precious about their experience, discounting those who 'can never really understand'. This may stem (184) from a feeling of weakness and a sense of being demeaned, or from being made to feel less than human in a cruel world. They may set up groups from which 'those who cannot understand' are excluded. This can have the effect of generating a powerful sense of survivor identity which provides a vehicle for anger and action, restoring a sense of control. It gives vent to feelings of having been let down by the very exclusion of authority and officialdom. At the same time, however, it may freeze the survivors in time, with the sole identity of 'victims'.

Quite simply, however, disaster survivors are a random selection of ordinary people, who may know nothing of emotional help or the professionals who offer it. They may never have experienced such intense emotions in their lives before, or may be ashamed of their feelings, fearing that they are going mad. They may have no notion of what their feelings represent, or that they are a signal that they may need assistance, and have no idea of what help entails. The notion of talking about painful inner experiences to a stranger may be unfamiliar, frightening and shameful. One survivor of the Bradford fire, an elderly woman who was recovering in hospital from her burns, was approached by a social worker who introduced himself and asked how she was. 'Oh no . . . the welfare,' she exclaimed, 'that it should come to this!'

Survivors of the 1987 Zeebrugge disaster were asked (343) to rate four statements which it was hoped would tap negative attitudes to emotional expression. These were: (i) I think you should always keep your feelings under control; (ii) I think you should not burden other people with your problems; (iii) I think getting emotional is a sign of weakness; and (iv) I think other people don't understand your feelings. The more survivors disagreed with these notions, the lower were their levels of psychological symptoms and the higher their received social support. The 'stiff upper lip' therefore appears to interfere with the successful psychological processing of traumatic experiences.

Quest for meaning

It has been said that 'you cannot understand disasters of any kind without considering the need to give meaning and inner form to the experience, and to life thereafter' (188). The survivor needs to make a 'formulation' of their

experience in the attempt to explain and gain mastery over it. Formulation is a key element of psychological processing, and hence of much psychological treatment of trauma.

The survivor's search to understand the experience of the disaster exists on a number of levels, which might be termed a 'hierarchy of formulation'. In terms of the development of understanding over time, a chronological sequence might be:

1 Why did it happen?
2 How did I escape?
3 Why did I escape?
4 Why do I feel like this?
5 What does the way I feel now mean about me as a person?
6 What does all that I have been through mean about the way I understand life?

Firstly, there is the need to understand *why* the incident happened, and this may be enhanced in technological disaster. Many survivors of the Zeebrugge disaster became fascinated by any reference to the accident and its cause. They scanned the papers, cutting out references to the tragedy, and avidly watched any relevant item of news on the television. (This was not universal as many could not bear to see or read any such references.) The verdict of the public inquiry was particularly important, not so much in justifying their blame or anger, but in the public establishment of clear responsibility. Some survivors describe that the experience is almost like needing a public declaration that they themselves did not cause the disaster. The Zeebrugge inquiry conclusions alone enabled some survivors to put to rest their quest for meaning.

Secondly, it may be crucial to understand the means of survival. Zeebrugge disaster counsellors took diagrams of the ferry with them on visits to survivors, enabling many to make sense for the first time of their route of escape. Knowledge may bring sadness, as one girl realised during this exercise that she was separated from her mother, who perished, only by a row of seats. Knowledge, however, is almost invariably better than wondering. Some who did not find this sufficient found it necessary to return to identical ships, or even the wreck itself, to really understand how they escaped. It also became necessary for many to trace those who had helped them, to build on their stories of survival, or simply to thank them. *Heraldlink* and *City Link*, newsletters which were jointly edited by survivors and professional helpers after the Zeebrugge and Bradford disasters, were used to satisfy this need to turn over every stone in order to accomplish a thorough understanding of all that had happened.

Why the person escaped is a question that may be difficult ever to answer, and as we have noted is one of the roots of survivor guilt. Survivors also

have to face the question as to why they feel as they do. They are taken unaware by the strength of their feelings, and self-concepts such as 'I am strong', or 'Men don't cry', may be damaged, leading to a possibly valuable, but often negative, personal re-evaluation.

The survivor's life is, however, irrevocably changed – there is no going back. The true meaning of survival involves finding a place for the experience in a new view of the world, its institutions and authorities, the value of life and family relationships, and risk and hazard.

POST-TRAUMATIC STRESS DISORDER

It must not be assumed that all response to trauma is inevitably negative. After a tornado in Xenia, Ohio, in 1974 (308), despite a 'significant rise in symptoms of psychological stress', 84 per cent of people claimed that their experiences had shown them that they could handle crises better than they thought, and 69 per cent felt that they had met a great challenge and were better off for it. Twenty-seven per cent claimed relationships with close friends and family had improved, and 28 per cent reported their marriages to be more satisfying. Whilst technological disaster may result in higher distress levels than natural disaster (259), those involved in technological tragedies may experience similar positive views. Thus of a group of rescue workers involved in the aftermath of a major rail disaster (290), 35 per cent felt more positive about their own lives as a result of their involvement. Quite simply, the confrontation with death can reveal the importance of many aspects of life.

The effects of experiencing major trauma can be summarised as the following (106):

- A proportion of survivors, perhaps up to 25 per cent, may have no particular reaction at all.
- Twenty-five per cent may experience transient psychological symptoms, dissipating over six weeks (101, 95).
- Fifty per cent will experience more significant, persisting symptoms with which they need assistance.
- Twenty-five per cent will go on to develop post-traumatic stress disorder (PTSD) (105).
- Half of the cases of PTSD will remit within the first year (351).
- Half of the cases of PTSD may be chronic, continuing over decades if not treated.
- Up to a third of survivors may develop more chronic symptoms, including PTSD, anxiety and depression.

However, clinicians must take care not to overestimate the prevalence of

PTSD, and not overdiagnose it. They should not forget that survivors will experience more well-observed conditions such as anxiety, whether general or phobic; depression; or indeed, no formal condition at all (353).

The concept of PTSD was first described in 1980 in the 3rd edition of the *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association (DSM-III). This was revised in 1987 and again in DSM-IV which was published in 1994 (7). In 1992, the World Health Organisation included the concept of PTSD in ICD-10, the tenth revision of the International Classification of Disease system (350).

PTSD as defined by DSM-IV has three main groups of symptoms: re-experience phenomena, avoidance or numbing reactions, and symptoms of increased arousal.

Qualifying criteria

Firstly, the nature of the trauma is defined. The person must have 'experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others'. (It is interesting to note that it has been estimated (105) that three-quarters of the general population of the United States has been exposed to some event in their lives which meets this sort of criterion.) Secondly, the degree of the trauma is defined. The person's response must have 'involved intense fear, helplessness or horror'; or in the case of children, involved 'disorganised or agitated behaviour'. If both of these criteria are met, then the person must have a requisite number of symptoms from the three areas of symptomatology.

Re-experience phenomena

These involve the traumatic event being persistently re-experienced in one (or more) of the following ways:

- Recurrent and intrusive distressing recollections of the event including images, thoughts or perceptions (in young children, repetitive play in which themes or aspects of the trauma are expressed).
- Recurrent distressing dreams of the event (in children there may be frightening dreams without recognisable content).
- Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, even those that occur upon awakening or when intoxicated). In young children, trauma specific re-enactment may occur.
- Intense psychological distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event.

- Physical reactivity upon exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event.

Intrusive recollection and nightmares will be familiar from descriptions of the death imprint. Intrusive imagery occupies a broad spectrum (40), from 'dim impressions to vivid, detailed memories that again and again abruptly enter consciousness and are difficult to dispel (intrusive-repetitive images) to pseudo-hallucinations, hallucinations, or hypnogogic phenomena (imagery which comes on the border between sleep and wakefulness)'. It is not the same as post-traumatic rumination, which lacks the visual element, but which is extremely common. Some evidence suggests that those who have a more highly developed visual imagery ability may be more prone to flashbacks and nightmares (38).

Traumatic nightmares in people suffering PTSD tend to occur early in the sleep cycle and are accompanied by considerable body movements – in some cases bed partners may be physically attacked. They often have elaborate content, tending to be exact replicas of actual events (329). Other types of post-traumatic dreams include those of similar events (e.g. car crashes in general rather than the specific one in which the person was involved) or merely dreams which are simply described as threatening. It is possible that there is an association between intrusive images and dreams as not only is their content similar, but in some cases dream disturbances precede the onset of flashbacks (67).

What is the role of intrusive imagery? Its presence may suggest failure to adapt mentally to the traumatic event. Alternatively it may be positive evidence of processing of information about the trauma, where post-traumatic anxiety is perpetuated through imagery, and a resolution achieved (142). The negative element is that 'trauma linked imagery, thoughts, or perceptions lead to painful affect, which leads to a defensive or coping reaction' (28), perhaps involving avoidance or denial. There is thus a cycle of re-experience followed by avoidance and denial.

'As if' phenomena describe the feeling 'as if the event was recurring'. One woman who had been involved in a car accident, in which the vehicle had rolled over several times, was a passenger in a car several years later when an oncoming vehicle began to skid towards them. She described how 'As I looked at it I was suddenly back in that car, going over and over, hearing the sound of smashing glass'. Intensification of feelings by reminder or re-exposure is a different phenomenon, which is more common. For survivors of the Zeebrugge disaster images of the impact and general distress could be triggered by merely hearing the sound of running water in a bath or shower. Similarly, a traumatised bank clerk who was the victim of an armed raid experienced a raised voice or sudden movement in the banking hall as the signal of another hold-up, leading to the re-experience of many of the feelings related to the original event. Here, the re-experiencing is related to

hypervigilance. The bank clerk is alert to the possibility that any person coming through the door is a potential raider.

The occurrence of physiological reactions to re-exposure to an actual or symbolic reminder of the trauma is common. These reactions which are familiar anxiety symptom manifestations of the autonomic nervous system (palpitations, sweating, etc.) have been measured closely in a few individuals. Thus in a study of a concentration camp survivor and a partisan (68), blood pressure rose specifically when discussing the trauma, as distinct from other life stresses. 'Emotional support and empathic listening to an account of nightmares coincided with an impressive fall in blood pressure' in one of the subjects.

Avoidance or numbing phenomena

These include persistent avoidance of things associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

- Efforts to avoid thoughts, feelings or conversations associated with the trauma.
- Efforts to avoid activities, places or people that arouse recollections of the trauma.
- Inability to recall an important aspect of the trauma.
- Markedly diminished interest or participation in significant activities.
- Feelings of detachment or estrangement from others.
- Restricted range of affect, for example unable to have loving feelings.
- Sense of foreshortened future, for example does not expect to have a career, marriage, children, or a long life.

Many of these phenomena are familiar from Lifton's description of psychic numbing. Survivors use many different mechanisms to ward off thoughts about the trauma including attitude switching (64 per cent), narrowing of attention (52 per cent), inflexible or constricted thought (48 per cent), altered meanings (41 per cent), disavowal (25 per cent), and warding off reality by the use of fantasy (15 per cent) (183). Memory failure is also sometimes apparent.

Avoidance of real situations associated with the trauma is frequent; thus the victims of a building collapse were observed to avoid passing under bridges. Many survivors of the Zeebrugge disaster not only shunned the prospect of ferry travel again, but could not even bear to see the sea, and in the immediate aftermath of the disaster could not face taking a bath or shower. Not being able to avoid such situations, and having to re-enter them, can lead to an increase in anxiety. This has been observed in those who return to sea after maritime disaster (181). After the 1989 M1 air crash in

the UK, injured passengers were airlifted from the motorway to hospital, and many expressed obvious concern at the prospect of further air travel so soon after the trauma (6). A man subject to six occurrences of armed crime began to avoid anyone who looked 'suspect'. Driving along he became aware he would have to pull up at traffic lights outside a pub where a group of youths were drinking. He drove down a back road to avoid the junction.

Diminished interest in normal activities is an extremely common symptom in those with PTSD. Feelings of detachment and estrangement are more variable, as is restricted ability to feel. However, their presence and intensity is indicative of a more severe reaction. A sense of foreshortened future has been described by many survivors of trauma. Even for children involved in the Chowchilla school bus kidnap, twenty-three out of twenty-five suffered from the sense that their futures would be greatly limited. 'They expected an unusually short life span or a future disaster, or they were unable to envision marriage, children or career' (310). One 12-year-old remarked: 'I worry I'm going to die when I'm young. I don't think I want a wife. If I do, I would always have to take care of her.' In a similar vein, an 11-year-old girl stated: 'I think I'm going to die young. I'm sure of this. Maybe twelve years old. Someone will come along and shoot me.' Adults often share the same bleak perspective on the future, thinking they will never get married, have children, or live to be old.

Of a group of general traumatic stress patients, 75 per cent felt hopeless about the future (143), and this raises the important question as to whether some of these features reflect depression rather than the specific entity of PTSD. Clearly, there is overlap between the symptoms of depression and PTSD both in respect of emotional numbing and increased arousal. Also, there is often a co-morbidity of depression and PTSD: 34 per cent of the survivors of terrorist attacks with PTSD (193) also qualified for a diagnosis of depression, and it was the most common overlapping diagnosis in a group of in-patients with PTSD (108). That there is a common pathway is indicated by the finding that the development of depression (and PTSD) was mediated by the amount of intrusions experienced at four months (207).

Symptoms of increased arousal

These involve persistent symptoms (not present before the trauma), as indicated by at least two of the following:

- difficulty in falling or staying asleep;
- irritability or outbursts of anger;
- difficulty in concentrating;
- hypervigilance;
- exaggerated startle response.

PTSD is accompanied by a number of physical changes, both neurophysiological and biochemical (119). In short, 'people with PTSD suffer from generalised hyperarousal and from emergency reactions to specific reminders' (328). These include:

- increased arousal of the sympathetic nervous system;
- hypofunction of the hypothalamic–pituitary–adrenocortical axis;
- dysregulation of the endogenous opioid system (decreasing pain threshold).

Sleep disturbances are commonly found in survivors as difficulties in dropping off (initial insomnia), frequent waking or early waking. Sleep disturbances in PTSD are more characterised by anxiety than general insomnia (149). Increased irritability is also frequently reported. Those affected find themselves easily angered by inconsequential events, such as a family member leaving a cup on the floor. There is also a relationship of PTSD with more serious violence (52).

Duration and effect

Lastly, the duration of these symptoms must be more than one month, and the disturbance must cause 'clinically significant distress or impairment in social, occupational, or other important areas of functioning'. If the symptoms are of less than three months' duration, the PTSD is described as 'acute', and if the duration of symptoms is more than three months, the PTSD is described as 'chronic'.

The effect of PTSD on interpersonal relationships demonstrates how the symptoms act together to cause this 'impairment of social functioning'. This account of the wife of a Zeebrugge survivor sums up the possible problems succinctly:

> Since that fateful day it is hard to describe just how much our lives have changed. We thought he was so lucky to have survived, not knowing he would never be able to return to the sea. We moved away hoping that by putting some distance between us and the Channel it might help – it hasn't. The patience he once had is gone, he snaps at the children, some days I cannot do anything right. He gets depressed and isolates himself, sometimes he just sits and cries and all I can do is be there for him when he needs me. Sometimes we shout and argue over silly things that would have normally passed unnoticed and at other times there are long silences where once we would have talked things out.

This brief description demonstrates avoidance, irritability, detachment and

depression. Where one partner is a survivor of an event the other did not experience, the survivor often feels that the partner cannot understand because they were not there, and comfort may only be found in the company of other survivors. He or she may never share all that happened, leaving the partner feeling excluded or resentful. The partner in turn may compound things by remarking 'I can't understand what all the fuss is, you weren't hurt or anything, were you?'

One couple involved in the Zeebrugge disaster felt that it was certain that they would die. They said their 'goodbyes' to each other, thanking each other for the reasonably happy life they had spent together. Both were saved. As the months wore on, they found that having said 'goodbye', it was very difficult to say 'hello' again, and found themselves distant and irritable with each other, arguing over petty things.

The previous delicate balance of a relationship may be badly disturbed by the new self-image that survivors acquire as a result of their actions. One man, previously dominated by the wife he rescued, found that his acts of heroism changed his view of himself as passive and helpless. He began to distance himself from her, whilst she reversed their previous roles, becoming house bound. For some survivors the experience does in time contribute to personal growth, despite confusion in others around them.

A study of survivors of terrorist attacks in Northern Ireland (193) was the first to identify a specific relationship between the presence of PTSD and marital difficulties. Taking into account only those difficulties that had arisen since the incident, disharmony was found in 46 per cent of those with PTSD and 23 per cent of those without. There was no difference in the levels of disharmony whether the victim had been male or female. The quality of the relationship prior to the trauma was, however, not known, and it is possible that an unsupportive relationship itself could cause a particularly severe or prolonged reaction (304).

OTHER FORMAL POST-TRAUMATIC CONDITIONS

PTSD – ICD-10

The ICD-10 diagnosis of PTSD is simpler, focusing mainly on re-experience phenomena. Under these criteria, PTSD

> arises as a delayed and/or protracted response to a stressful event or situation (either short or long lasting) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone (e.g. natural or technological disaster,

> combat, serious accident, witnessing the violent death of others or being the victim of torture, terrorism, rape, or other crime).

PTSD must arise within six months of the traumatic event. Emotional numbing and increased arousal symptoms are not essential to the diagnosis, but 'there must be a repetitive, intrusive recollection or re-enactment of the event in memories, daytime imagery, or dreams'.

Acute stress disorders

DSM-IV introduced the concept of acute stress disorder. This shares the same initial qualifying criteria as PTSD. In terms of symptomatology, the person must have experienced a range of dissociative symptoms during or after the event, suffered persistent re-experience phenomena, avoided stimuli that arouse recollections, and suffered symptoms of anxiety or increased arousal. This disturbance must last for a minimum of two days and a maximum of four weeks.

ICD-10 also describes an acute stress reaction, lasting for about three days, showing 'a mixed and usually changing picture; in addition to the initial state of daze, depression, anxiety, anger, despair, over activity and withdrawal may all be seen, but no one type of symptom predominates for long'.

Adjustment disorders

DSM-IV describes adjustment disorder, a response to a stressor developing within three months of its onset. Depressive, anxiety or behavioural symptoms may appear, and should not be present for more than six months.

ICD-10 also describes adjustment disorder. This may arise as a result of a 'significant life event e.g. the possibility of serious physical illness'. Symptoms may include 'depressed mood, anxiety, worry, a feeling of inability to cope . . . or conduct disorders'. The change should not last for more than six months, and should not be of 'sufficient severity or prominence in its own right to justify a more specific diagnosis'.

Disorders of extreme stress

ICD-10 introduced the concept of 'enduring personality changes' to describe longer term changes in personality following massive trauma, where the person becomes avoidant, hostile, distrustful and hopeless. This acknowledges that PTSD does not adequately describe all the more severe post-traumatic reactions.

Notions such as 'complex PTSD' (118) or 'disorders of extreme stress' (330) have been proposed. The latter contains five areas of symptomatology:

1 Impairment of regulation of affective arousal, including difficulty in controlling anger, suicidal impulse, risk-taking behaviour or sexual feelings.
2 Dissociation and amnesia.
3 Somatisation, the experience of a range of bodily symptoms.
4 Alterations in the perception of self and others such as chronic guilt and effects on relationships including inability to trust and the victimisation of others.
5 Alterations in systems of meaning, including loss of previous beliefs.

Diagnostic frameworks – a mixed blessing?

When first proposed, the concept of PTSD described nothing new, but it represented an attempt to provide standard criteria, and to define when a 'normal' reaction to trauma becomes 'abnormal'. It allowed comparison in research between groups of people experiencing different stressors. For survivors themselves, the concept was a validation. It indicated that their suffering was a recognised entity, and hence legitimated their experiences, both internally for themselves and externally in the eyes of others.

The cutoffs for diagnosis, both in terms of time and number of symptoms required to be present, are arbitrary, and represent, of course, no absolute truth. However, most clinicians experienced in the area of PTSD accept that the concept has face validity even if it is overused.

The recognition that post-traumatic reactions which are not classifiable as PTSD can also be disturbing has led in the sixteen years since DSM-III to a minor proliferation in trauma-related diagnostic categories. Whether this scramble to classify everything was the sort of recognition that was needed is open to question. There are clear dangers in the overmedicalisation of approaches to survivors of trauma. These are explored in depth in this book, but they relate practically to the difficulty that victims have in coming forward for help. The fear of psychiatric stigmatisation may delay this. Survivors also find the act of diagnosis confusing. They may be told for therapeutic purposes that their experiences are normal reactions to abnormal events, but for the purposes of medico-legal examination a 'disorder' has to be not only identified, but emphasised.

POST-TRAUMATIC STRESS IN CHILDREN

Do the post-traumatic reactions of children differ from those of adults? Whilst the way certain symptoms are demonstrated differs, there is much greater concordance than dissimilarity.

Children had been described as not experiencing intrusive imagery of the flashback type (309), but with children involved in the capsize of the *Herald*

of Free Enterprise, 'most experienced intrusive thoughts, and some experienced full-blown flashbacks' (355). Similar findings emerged in a group of children experiencing a sniper attack on their school playground (249). They often suffered intense nightmares about the events, which some believed were predictive about the future. Unique to children is post-traumatic play, encountered in eighteen of twenty-five children involved in the Chowchilla school bus kidnap (310). One 13-year-old described the following:

> Me, Mary, and Brian, my little cousin [not one of the kidnapped children], play we kidnap each other. But that don't remind me. We play it almost every day when we go over [to Brian's]. We take turns. We tie him up. We hide him from the other one. Then they break loose or stuff. We've scared each other badly with that game. We've played it in the dark. Sometimes we pretend we're leaving the person. When I'm 'kidnapper' I leave them there waiting for me.

Children and adolescents also demonstrate avoidance. Thus, 'many young people do not want to talk about their feelings with their parents so as not to upset them' (355). (At the same time the parent may avoid talking to the child about the trauma for exactly the same reason.) Similarly, they may not want to talk to their peers, often for fear of mockery.

Anxiety may be particularly prominent in children. After trauma children may regress to fears typical earlier in development. They may be frightened to go upstairs on their own to use the toilet or go to bed. They may insist on sleeping with the light on, or having a sibling in their room, or even their bed. They may be particularly prone to intrusive thoughts at night. Their sleep may be badly disturbed, with screaming in the night, either in response to dreams, or 'night terrors'. This may lead to them insisting on coming into the parental bed. Nocturnal enuresis may occur after the child has been dry for many years.

Children may show marked avoidance and heightened awareness of danger. After the 1965 Aberfan disaster (175) surviving children were 'unwilling to go to school or out to play', and would be particularly upset during periods of bad weather like that which had preceded the slide of the tip onto their school. Children may be particularly frightened for the safety of parents. They may show clinginess rather than the symptoms of emotional numbing. Yet, traumatised children are sometimes described by parents as shutting themselves off in the house in their rooms, withdrawing from family and avoiding friends. In some, frank depression may develop, although this may be difficult to distinguish from the normal fluctuations of mood of adolescence. Guilt is often observable in teenagers. Children may demonstrate increased irritability, squabbling with parents, destroying possessions or fighting with siblings or school friends. Concentration is often affected, and this may have a deleterious effect on school performance.

However, although the resilience of children should not be overemphasised, disturbances are generally short lived, and whilst a wide range of symptoms may be reported by children, long term effects are generally minimal (15). Unfortunately the same cannot be said for 'multiple-blow' trauma, such as repeated abuse.

INFLUENCES ON COPING WITH TRAUMA

What determines the way in which a person responds emotionally in the aftermath of a traumatic event? Coping and recovery depend on successful processing. Emotional processing is the 'process whereby emotional disturbances are absorbed, and decline to the extent that other experiences and behaviour can proceed without disruption' (251). The persistence of symptoms of post-traumatic stress may represent the failure of processing. Satisfactory emotional processing can be said to have taken place when:

1 Probes such as reminders no longer elicit disturbance.
2 The internal feeling of distress declines.
3 Disturbed behaviour declines.
4 'Routine' behaviour, such as good concentration, returns.

Three areas will influence the quality of a person's emotional processing and their recovery from trauma: dimensions of the person, dimensions of the trauma, and dimensions of the recovery environment.

Dimensions of the person

What makes people resilient to trauma? What contributes to the ability to tolerate suffering? Sadly, these are questions to which we have few answers. Indeed, the answers are likely to be complex. There is, for instance, no relationship between courage and PTSD – in the First World War, men who developed shell shock were as likely to be decorated as other soldiers (221). We do, however, have some knowledge of what constitutes vulnerability. This includes demographic factors, such as age and sex; individual and familial risk factors; and the characteristics known as 'personality'.

1 *Gender*. It has been suggested (100) that 'gender might best be regarded as a factor that relates to the specific expression of symptoms rather than one which defines risk per se'. However, whilst males are at greater risk for exposure to traumatic events, once exposed, females appear more often to develop PTSD, and there is greater risk of it becoming chronic (226).

2 *Age*. Younger children (5–10) are more vulnerable than older children (11+) to the same traumatic events. Risk increases with middle age and beyond owing to the 'burden of additional age-related stressors' (105).
3 *Individual and familial risk factors*. These include:
   (a) previous severe adverse life events (306);
   (b) prior victimisation (e.g. childhood sexual/physical abuse) (27);
   (c) pre-existing mental health problems such as anxiety or depression (337);
   (d) family psychiatric history (62).
4 *Personality*. Before the event, the survivor was a person with characteristic ways of feeling, thinking and behaving. Important in recovery will be the person's beliefs and attitudes, which are a major influence on coping strategies. Styles of personal responding which are known to influence emotional processing are neuroticism and introversion (251), being inner oriented (155), and the need to suppress expression of feelings (96). Following a Norwegian factory fire (337), personality factors which were found to influence the development of psychological difficulties included high basic levels of anxiety and dependent, insecure, highly sensitive, introverted and neurotic traits, with a tendency to withdrawal and regression.

Studies of the course of emotional reactions in volunteer fire-fighters involved in the 1983 Australian Ash Wednesday bush fires (203, 205, 206) have raised interesting questions about the importance of previous personality in the development of PTSD. In these studies, the relative importance of the disaster, post-disaster experiences and personality factors were examined four, eleven and twenty-nine months after the fires. Whilst severity of exposure to the disaster and the losses sustained played a significant role in the levels of immediate distress, they made no detectable contribution at twenty-nine months. Other life events following the disaster appeared equally as important as the disaster itself in determining distress, even at four months, leading to the suggestion that 'life events have a more important role in perpetuating post-traumatic morbidity than in contributing to its onset'. (However, these subsequent life events may of course be related to the original event.)

At all stages, pre-existing personality factors constituting 'vulnerability' had a more important role in determining distress, this importance increasing as time went on, indicating that personality factors were a more important cause of long term disorder than acute disorder. Neuroticism (as measured by the Eysenck Personality Inventory) was the major factor, but a past history of treated psychiatric disorder was also a predictor of PTSD. Cognitive and emotional preoccupation with the fire played an important role in the onset of disturbance in the months immediately after the disaster,

but the extent of this initial preoccupation did not determine the outcome at twenty-nine months. Thus a number of survivors were preoccupied with distressing imagery without developing a long term disorder. A link also appeared between such imagery and neuroticism, suggesting that whilst cognitive and emotional preoccupation with the trauma may be an important factor in the development of PTSD, it may also be an indication of a pre-existing emotional style.

These results indicate that different factors have disproportionate influences on recovery at different times after the disaster. However, at no time was the effect of disaster-related factors greater than the pre-existing personality factors. Whatever criticisms may be levelled at the study (namely that the 'personality' measures are *post hoc*, and may themselves be influenced by the traumatic event), its findings demand attention.

Perhaps a more useful way of framing 'personality' in this context is to focus on psychological resources, or coping style. It may be easier to present survivors with clear reasons for adopting particular coping strategies than to approach imponderables such as 'personality'. People differ, for instance, in the extent to which they use approach or avoidance as a coping strategy. 'Approach facilitates action, while avoidance interferes' (100), yet on the other hand, avoidance can temporarily reduce stress allowing other coping strategies to be used. Active coping styles are assumed to be more effective than palliative. After the Buffalo Creek damburst, cleaning and repairing one's home, and being able to give personal help to others, was the best predictor of extent of later psychopathology (103).

Disaster, as has been suggested, can break down an individual's belief in a predictable and controllable world. Therefore, the extent to which a person retains a belief that they can control outcomes (internal control), rather than seeing outcomes as generated by factors outside their control (external control), might be expected to have a positive effect on outcome. External locus of control has been found to be associated with greater symptoms of PTSD (100).

In a study of survivors' ways of coping (46), it was found that the most commonly reported were the 'emotion-focused' coping strategies of avoidance, emotional suppression and wishful thinking. These, however, were temporary expedients rather than consistent ways of coping. 'Problem-focused' coping was used more extensively in those with an internal locus of control.

Dimensions of the trauma

Although it is possible that the longer PTSD lasts, the less important is the role of traumatic exposure, it is generally accepted that 'premorbid risk factors become less important as the intensity of the stressor experience increases' (218). The most catastrophic events may be expected to affect

most people, irrespective of history. A 'dose–response' relationship exists: the more intense and threatening the experience, the more the risk of PTSD.

Thus, difficulties will arise if the stressor is intense or severe (139) and involves heat and noise (30) or darkness; is sudden, unanticipated and uncontrollable (145), irregular, occurs in large chunks, and involves loss such as bereavement (137), threat to life, personal injury, or exposure to death. Other important elements include the duration of the trauma, whether it was experienced alone or with others, whether the threats involved in the event were single or multiple, and whether there is a possibility that they may reoccur (344). The threatening nature of the situation may be objective, for example the frequency of violence in combat stress, or the number of people who die. However, the experience of threat is also subjective: believing one is about to die, even though the threat is not objectively there, or is uncertain, is common in accidents, and is difficult to erase.

Obviously, dimensions of the person and the situation will interact with each other to govern how the person feels, thinks and reacts in the situation itself, and in the course of recovery.

Dimensions of the recovery environment

Key elements in the recovery environment will include isolation and levels of social support (256), coupled with perceptions of the helpfulness of such support (290), ongoing stressors, cultural rituals for recovery, community, society and media attitudes towards the event, and opportunities for alternative ways of coping and behaving (295).

The role of social support as a potential mitigator of stress has received considerable interest. However, 'although there exists some evidence that social support can buffer the impacts of life changes, it must be interpreted with extreme caution' (311). In a follow-up of survivors of the 1988 *Jupiter* cruise ship disaster, the support received from family and friends decreased significantly over an eighteen-month period. However, higher crisis support in the immediate aftermath was found to predict less post-traumatic symptomatology at a later date. In a follow-up of survivors of the Zeebrugge disaster (133), those who reported family conflict in the first year showed higher symptom levels, as might be expected. In the study of negative attitudes to emotional expression referred to earlier (343), these were related to lower levels of received social support, indicating that a number of different factors influence the presence/absence of social support.

A MODEL OF TRAUMA AND POST-TRAUMATIC STRESS REACTIONS

PTSD and other formally defined conditions are only a partial description

of human response to catastrophe. They describe certain symptom outcomes, yet do not describe the process behind the symptoms. This process we might properly call 'trauma', the symptoms of PTSD being the visible sign of this internal process.

Cognitive processes are a key to understanding 'trauma'. As we have observed, the experience of threat is subjective. It is not just the objective features of the traumatic event that govern the extent of response, but the meaning that it has for the person. Individuals strive to attach meaning to events, to make the world comprehensible (335). Indeed, the 'constructive perspective' would hold that 'the human mind is a product of the personal meanings that individuals create' (218).

As we have already suggested, the meaning in question may vary from that of the event itself, to the implications that the event has for the rest of existence. A family may escape uninjured from a car crash, yet the parents may be plagued by 'What if' or 'If only' thoughts. 'What if' thoughts may create a scenario for them which did not happen, in which the children may have been injured or killed, and 'If only' thoughts may create a perspective in which they were culpable for the accident for deciding to go out, and deciding to take that route at that time. The accident is no longer a random event. The world may suddenly be full of danger, and they may be incompetent parents for failing to deal with it.

The person who experiences a traumatic event is a person with a history, and we have examined above some of the features of this which make people more vulnerable to psychological distress. But people are more than the sum of their 'risk factors' – they have a basic account of who they are, based upon their personal history. They have a view of why they are like they are, of what has influenced them to react as they do. Just as they have a picture of themselves, so they have a picture of the people around them, how and why they behave as they do, and the way the world generally works. The experience of a traumatic event, or how it comes to be seen, causes 'a rupture in the person's personal, family and community identity' (60). It may seem as if a severing has occurred between the present and what has gone before. The individual may now report being a 'different person', whose reactions seem alien. The pre-existing individual may seem a stranger. People around them may also seem now to be strangers, and the world a foreign place. If unprocessed, the rupture continues, severing the meaning of all that happened in the past from the present and the future. Part of emotional processing is the re-establishment of continuity between past and present, and the integration of the traumatic experience. Literally, the present and the future need to be made sense of in light of the past.

Thus, one of the major goals of emotional processing after trauma may be to achieve 'cognitive completion' (140), to integrate the stressful experience with enduring models of the world and one's relation to it. The various steps in the process of formulation described earlier in this chapter are part

of this process. In war veterans, a process of 'sealing over' has been described. The veteran makes use of grand rationales ('I did it for King, Country and Freedom') to put their behaviour and reactions in some sort of context. It 'allows for a gentler management of the whole experience as unique and consistent with itself, although separate from other experience' (291). Survivors of technological disaster rarely, however, have the opportunity of such rationales. Yet 'integration' or 'completion' must be achieved. 'This more arduous process involves not permeating an experience with an overall meaning, but rather, weaving each strand of the experience into the overall fabric of their lives' (291).

Sadly, many people remain preoccupied with the rupture. Some may find their previous life so distant that they cannot retrieve any positive memories about the past. Others may be bound up with 'unfavourable comparisons between life *as it is*, as compared with what it *might have been* had the traumatic event not occurred' (218). Others may idealise life beforehand, comparing life before with life as it is now, grieving for what has been lost.

The core of the rupture is that individual assumptions about oneself and the world, which are generally held without the awareness that they actually exist, are violated by trauma. These are the 'cognitive structures', or schemata, the 'implicit beliefs, schemes and readiness sets that provide the "if . . . then" rules by which one functions . . . the core organising principles' (218). Key assumptions include (151):

1	'I am invulnerable – it can't happen to me.'	v	'I am vulnerable – anything can happen to me.'

In order to function in an inherently dangerous world, to drive fast on a motorway, for instance, one must have a sense of invulnerability. Or at least, one must think 'If I take reasonable care, nothing untoward will happen'. Disaster survivors learn that they were taking good care, but catastrophe still overtook them. They are now ultimately vulnerable, and anxiety may predominate. PTSD has been described as a 'fear structure', a programme to escape danger, containing information about the feared situation, and verbal, physical and behavioural responses to it. Of course, many fear structures exist in everyday life, but 'what distinguishes PTSD from other anxiety disorders is that the traumatic event was of monumental significance and violated formerly held basic concepts of safety' (86).

2	'The world is safe, orderly, predictable.'	v	'The world is dangerous, chaotic, unpredictable.'

One of the major experiences of victimisation is the feeling of having lost control over things. Normally, daily life has a certain comforting predictable monotony. Even for those whose lives are chaotic, the chaos is predictable.

Disaster survivors, however, learn that the world is suddenly completely unpredictable. For those who have been cautious, careful people, the world may lose its meaning.

3 'I am a good person.' v 'I am a bad person.'

The notion that one is good, decent and worthy, a concept crucial in maintaining self-esteem, may be seriously questioned by survivors, who may 'see themselves as weak, helpless, needy, frightened and out of control' (151). Moreover, there is a basic assumption that 'good things happen to good people – bad things happen to bad people'. The frightening possible transition here is to: 'something bad happened to me, therefore I must be bad'. Many survivors feel the curious sense that their presence at the disaster had in some vague way 'something to do' with it happening.

In conjunction with these 'primitive, global, positive assumptions' (342), which may be shattered by catastrophe, there will exist a layer of attitudes towards expressing disturbed and disturbing feelings. As we have described earlier, many of these attitudes are negative. Such feelings may be viewed as socially unacceptable, distressing to others, a sign of weakness, or a signal of madness or loss of control. If the world is now seen as chaotic and unpredictable, action to deal with negative feelings may be useless, and those to whom one might turn for help unworthy of trust.

It has been suggested (55) that a 'traumatic memory network' is formed, containing 'event cognitions' (159), or intrusive imagery. Traumatic images are then subject to further appraisals, giving rise to thoughts about the imagery. It is here that the recognition (in either a more automatic or a more conscious way) that previous assumptions have been violated takes place. As 'crisis theory' predicts (44), 'coping' now takes place. For some, coping involves facing the intrusive imagery and ruminations, and effective processing will occur. Indeed, in one study, higher initial levels of intrusion were associated with lower levels of symptoms later on (55), confirming a positive link between intrusion and processing. Imagery thus may lead to 'revising the automatic processing of such information, to revising the relevant schemas . . . and to completing the processing of the stressful information' (141).

Early on, therefore, features of the traumatic event itself (stimulus features) are of primary importance. Traumatic memories stimulate a process of resolution. However, it is as if there is a transitional point at which previous personality including traditional ways of coping assume prominence. Thus, for some, coping will involve avoidance of traumatic images, or their triggers. Whilst some successful avoidance is a part of coping, too much may lead to emotional numbing (55). At this point the survivor is trapped in the pit of rumination, worrying about what to do, and reflecting on how they and life have changed. Not only may they be trapped in their particular 'fear structure', but given the shared pathway between

emotional numbing and depression (29), depressed mood may well be stimulated by the helplessness generated by this process of rumination and review. The 'breaking point' of crisis theory has been reached, and psychological disturbance predominates. The sense of rupture with the past is complete. Figure 1.1 shows a diagrammatic model of the relationship between these various factors (after 54).

BEREAVEMENT

Although bereavement may be caused by a traumatic event, trauma and grief are different entities, their effects operating separately, yet overlapping and interacting.

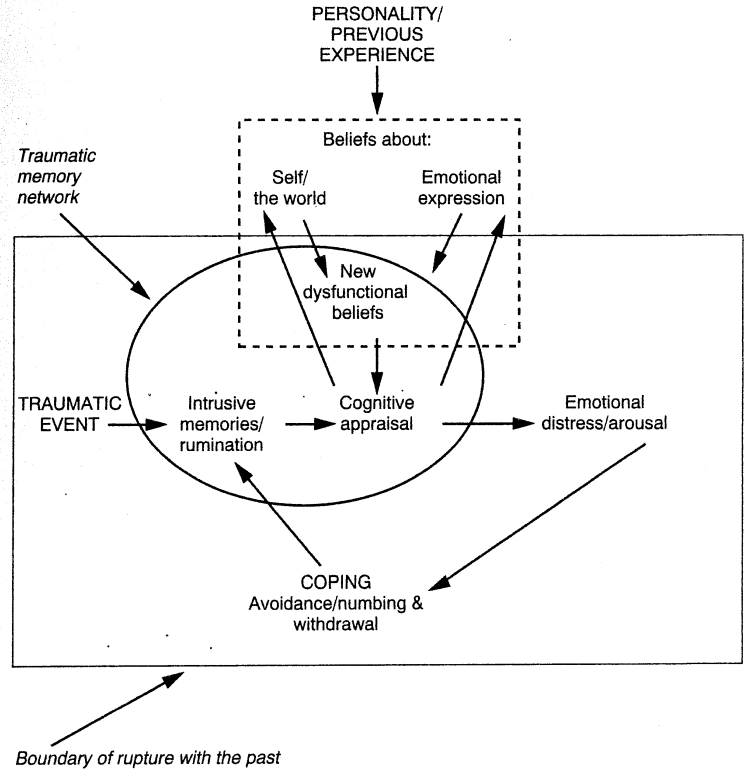

Figure 1.1 A model of post-traumatic stress reactions

Bereavement reactions

Just as human beings form attachments, so they lose them. Loss may be the single most difficult aspect of existence to come to terms with. The reaction to loss through death, bereavement, has a core of emotional reactions, known collectively as grief. Grief is often spoken of as having 'stages', yet those who work with the bereaved soon realise that this is not really the case. The notion of 'stages' implies an orderly progression, whereas the bereaved oscillate between a variety of experiences, which blend with each other, and are not successive. Secondly, it is not at all clear that all the elements of the process of 'working through' must be experienced and the intensity and duration of the elements for different individuals differ widely. Thirdly, there is no empirical evidence to suggest that stages do, in fact, exist.

A more useful approach may be to see grief as having a number of components (254): thoughts, feelings and behaviours which are interlinked, some of which tend to come earlier in the process of working through, and some later. These components wax and wane continually, blending dynamically. Alternatively, grief may be seen as comprising a series of tasks, which must be completed for successful resolution (349). These tasks include accepting the reality of the loss, experiencing the pain of grief, adjusting to an environment in which the loved one is no longer present, and withdrawing from the deceased and reinvesting emotional energy in new activities and relationships (220).

The main components of grief are presented below, in a rough chronological order. Each will rise and fall in intensity, the intensity lessening over time.

Shock

Shock is a universal, initial response to bereavement, whether expected or not. It may be momentary or prolonged, and experienced as disbelief and numbness, or as pain, calm, apathy or feelings that one is not real (depersonalisation) or that the world around one is not real (derealisation). It is as if feelings have been 'turned off'.

Disorganisation

Disorganisation is variable. The bereaved may collapse instantly, or may appear superefficient, becoming more disorganised over time. The experience is one of confusion.

Denial

Denial is a defence, the repression of an item of reality from conscious

awareness. It serves to protect the bereaved person from experiencing too much pain at any one time. It may be momentary or prolonged, and occurs throughout the process of working through; breaking down and returning in a way that may be both mystifying and alarming to those around the bereaved person. The facts of the loss may be denied, with the person behaving as if the loved one was still present, setting a place at the table or keeping the dead person's room just as it was the day they died. Alternatively, the meaning of the loss may be denied, the bereaved explaining 'it was a release' or 'she was never a good wife'. The fact that death is irreversible may also be denied, as demonstrated by a sudden interest in spiritualism. Auditory and visual experiences of the dead person's presence are normal experiences of momentary denial. Sometimes these are experienced as comforting; for others they are anxiety provoking, summoning fears of madness. The behaviour of searching also reflects denial. Here, the bereaved may find themselves actively looking for the dead person in places associated with them.

Depression

Depression is too broad and vague a term to be meaningful, but all its usual physical manifestations may be present. Two elements may often be seen. The first is 'desolate pining'. This is an active feeling, deep and empty, mixed with waves of psychic pain and an intense sense of unfillable yearning and longing. Secondly there is 'despair', a passive feeling of blackness, helplessness and hopelessness.

Guilt

Guilt is traditionally associated with depression. It may be real or imagined, and both seem equally troublesome. Similarly, guilt may be for a thought ('Why don't you drop dead?'), or an action such as causing a car accident in which the loved one dies. It may be particularly problematic in the setting of a previously ambivalent relationship.

Guilt may be from a feeling of release, an absence of sadness, or from angry feelings towards the deceased. As with 'survivor guilt' already discussed, it may derive from sins of omission, or from sins of commission.

Anxiety

All the physical feelings of anxiety may be experienced, as well as specific fears or a nameless sense of dread. The bereaved may fear being overwhelmed by the strength of their feelings, or may be frightened for the future in terms of survival in view of increased responsibility, financial changes or

life style changes. There may also be a heightened awareness of one's own vulnerability and mortality.

Aggression

Aggression is one of the most difficult aspects of grief. It is uncertain whether it is experienced by all bereaved or needs to be expressed at all. It is experienced on a continuum, from irritability towards friends and family (who 'can't understand'), to resentment and envy (towards those who still have husbands or sons), to anger against those who could have done more to prevent the death, to posturing against God for His unfairness, and finally to a deep anger towards the deceased for dying and leaving, the element which may be so difficult to express.

Resolution and acceptance

When the feelings decrease in intensity, there are longer gaps between their occurrence, and denial is absent, there can then occur a taking leave of the dead person and an acceptance that life must go on.

Reintegration

Reintegration involves taking up a new life in which the dead have no part. It is a long and painful process of setbacks and progress, with returns to grief at certain times such as anniversaries of the death, wedding anniversaries, birthdays, and family occasions such as Christmas.

Bereavement in children

The grief reactions of children differ in a number of ways from those of adults (248).

Concept of death

Children need to be able to 'understand the physical reality of death in order to grieve'. The notion of the irreversibility of death strengthens from the age of 5 onwards. However, differences in concept of death have no correlation with the development of symptoms (162). Believing that 'they won't understand', parents often prevent children going to funerals, yet there is now evidence that there is potential value in this, even for young children (339).

Sustaining sadness

The ability to sustain sadness is one which comes with maturity. However,

absence of sadness may be the result of attempts to disbelieve what has happened. Children who express the least sadness in parental bereavement may be the most behaviourally disturbed (163).

Recognising loss

Children are often prevented from registering empty situations – thus because they may eat earlier than the adults of an evening, they may not have the opportunity to sit at the dinner table at which the adult is absent. Alternatively they may anticipate missing a person at a specific special point in the future, such as a birthday. Children may actively search for the dead person, co-opting others to help. They may have very active reunion wishes, perhaps emerging in dreams, which can be frightening. Bereavement themes may dominate their play.

Memories

The memory of the last time they saw the dead person, or the last 'emotionally charged interaction', may become particularly important. The sense of 'unfinished business' may be keen.

Children will often reminisce about the dead person, recalling things adults thought they were too young to remember. As children develop, they may continually renegotiate the relationship with the image of the dead person in their mind, where the deceased may be present at all sorts of important life events.

Emotion

Children may show marked anxiety, becoming demanding and clingy, frightened of separation. They may fear that others will die, and need to restore the sense of safety and security. They may also be angry, disturbingly so with the person who has died and left them. There may also be guilt.

These problems may show themselves at school, where the child may have concentration difficulties and their work suffers. Peers may be cruel, and behavioural difficulties may appear.

SUDDEN VIOLENT DEATH

Bereavement is universal, yet there may be many problems in working it through. It has been estimated that one-third of the bereaved have a poor outcome in terms of resolution (197), and that a third of major bereavements may result in a need for counselling to help resolve the loss (258).

Four main areas contribute to the progress of recovery, the type of death,

the characteristics of the relationship between the deceased and the survivor, the characteristics of the survivor, and their social circumstances. The major findings in these areas are summarised in Table 1.1. It will be seen that sudden, unexpected or untimely deaths and those that are painful or horrifying represent risk factors for poor outcome.

It is helpful to distinguish three kinds of untimely deaths (338): premature deaths, unexpected deaths and calamitous deaths. Premature deaths, epitomised by the deaths of children, damage our 'social and emotional reality, including our belief in a future in which potentials become fulfilled'. Unexpected deaths are those which are sudden and unpredicted, and the stress may be measured by 'how drastically the death violates our inner timetable of expectation'. Calamitous deaths are not only unpredicted, but 'violent, destructive, demeaning and even degrading'. Bereavement by disaster may comprise all three of these elements.

Table 1.1 Risk factors in bereavement (after 83) (Factors ranked in approximate order of importance within each section)

Type of death	Cause for blame on survivor (214, 215, 231)
	Sudden/unexpected/untimely death (195, 240)
	Painful/horrifying/mismanaged death (214, 215, 231, 255)
Characteristics of the relationship	Symbiotic/dependent relationship (240)
	Ambivalent relationship (240)
	Spouse death (98, 237)
	Child under 20 dies (236, 273)
	Parent (especially mother) dies leaving child(ren) aged between 0 and 5 or 10 and 15 (236, 273)
	Parent dies leaving older, unmarried adult offspring (236)
Characteristics of the survivor	Grief-prone personality (intense clinging/pining) (240)
	Insecure/overanxious/low self-esteem (237)
	Previous psychiatric history (237)
	Excessive anger (240)
	Excessive self-reproach (240)
	Physically ill/disabled (244)
	Previous unresolved losses (72)
	Inability to express feelings (17, 57)
Social circumstances	Family absent/seen as unsupportive (49, 73, 211)
	Detached from cultural/religious support system (104)
	Unemployed (244)
	Dependent children at home (36)
	Low socio-economic status (2, 194)
	Other losses (164)

Shock

The sense of shock is enhanced following death in disaster. The suddenness and unexpectedness inherent in such situations may be compounded by the feeling of disbelief and bizarre reversal – people are involved in normally safe activities, such as returning from work, or are engaged in enjoyment, such as going on holiday or attending a football match, and then suddenly perish in horrifying circumstances. The disbelief of one Zeebrugge widow is evident in these words: 'I simply cannot think that he might be dead – he was so big, so strong – if anyone was going to survive it would surely have been him'. This 'cognitive dissonance' may continue for months or years (262).

Guilt

Guilt may occur in the absence of an ambivalent relationship. One survivor of the Zeebrugge disaster had organised the trip (an annual event to celebrate her husband's birthday) for that particular day against his wishes. He wanted to go on his birthday, but she asked him to go two days later to accommodate two friends from work, a mother and daughter. She was the only one who returned. She was hospitalised within two months in a psychiatric unit, with a diagnosis of depression. She spoke of her memories of hearing her two friends shouting for help, and seeing her husband disappear into a mêlée of bodies and then being submerged. 'I am a murderer', she said. She was unable to go and see the man who was both husband and father to her two dead friends. 'How can I see him?' she asked, 'I killed them.' Grief is known to be complicated when there is a cause for blame on the survivor (215).

Guilt frequently arises in the presence of ambivalence. Another Zeebrugge widow had a row with her husband the night before the disaster. He slept downstairs and came to her the next morning to tell her he was leaving. She retorted, 'Fuck off, I don't care if you never come back'. He died, and she found it necessary to attend many days of the three weeks of inquest, almost in an act of atonement. Again, ambivalence and excessive self-reproach complicate resolution (240).

In bereavement by disaster, as in all sudden death, the sense of 'unfinished business' with the deceased may be intense, and things left unsaid may be problematic in terms of guilt.

Anger

Although anger is a normal part of many bereavement reactions, excessive anger complicates recovery (240). In technological disaster there is often a very clear and justifiable focus for the anger of the bereaved. The issue of

preventability may come to preoccupy the bereaved intensifying anger and the duration and severity of grief (252).

Intense anger is natural in deaths where there is an identifiable perpetrator, such as murder. The bereaved may experience murderous retaliatory impulses, of which they may be very ashamed. Lifton suggests that this intensity of anger is connected to the 'internal struggle to assert vitality by attacking the other rather than the self in order to prevent a sense of inner deadness' (184).

When many die together, as in disaster, the possibility exists of a communal uniting of anger. Following the Zeebrugge disaster, parents who had lost adult children, for whom no compensation was indicated in British law, banded together to form the Herald Families Association. They were enraged that they were symbolically denied recognition that they had been bereaved. Their avowed aim was to see the prosecution of the ferry operator for negligence, and the institution of safer ferry standards. It remains to be seen whether such channelling of anger is an aid or a block to recovery.

Intervention of authority

The intervention of authority can enhance confusion and uncertainty. People may be informed that loved ones have survived when they have in fact died. The demand for statements which are necessary to aid later identification can feel like a persecution, or if guilt exists, may reinforce it. Later, bodies may be delayed from burial by seemingly unnecessary bureaucracy.

Helplessness

The sense of helplessness may be intense. This may relate to powerlessness to prevent the death, especially if the bereaved was also the survivor of the impact. One Zeebrugge widow was able to climb onto a ledge where there was, however, no room for her husband. She held him by the hair to keep him from the freezing water until she had no further strength, whereupon she had to let him go to his death. A bereaved father went to see his son's body, to find, to his horror, that one of his son's legs was missing. 'Where was his leg?', he moaned desperately to his counsellor (having been unable to tell any of the family). Just as the counsellor was helpless to answer his question, so he had been helpless to protect his son.

Aspects of the death

Aspects of the death of the loved one may be particularly important. Firstly, in some bereavements by disaster, no body is recovered. Normally following a death, the disbelief is gradually eroded by the reality of the absence of the deceased, and undeniable is the presence of a dead body. The transformation

of the loved one's body – the pallid colour, coldness, unyielding texture, fixed limbs and immobility – provide incontrovertible evidence of death. A mental transformation also has to take place whereby the loved one is recognised as no longer existing in the external world, their physical representation remaining only as an image in the internal world.

Although a majority of people (73 per cent) choose not to view the corpse of the loved one (208), there is generally an acceptance that someone, such as a relative, has actually done so, and as further evidence, physical deterioration, heralding death, may have been evident from hospital visits. In sudden violent death, this last element is rarely present. One widow of the Zeebrugge disaster who did not see her husband's corpse described the conceptual problem this created for her thus: 'I cannot accept that he is dead – he left home vital, strong . . . not seeing him again I just cannot imagine him dead, his body without life'. She could not believe that the ashes in the casket, which she slept with in her bed each night, were related to the body she loved. It was as if some transitional image of him was missing in the process of acceptance of the fact of his death.

Viewing the body of the deceased, which was in the first part of this century a common custom, is an important part of accepting the 'certainty of death', especially in sudden unexpected loss. In the absence of a body, this certainty, which is necessary for effective grieving to begin, may never be established. If the body is recovered, but not seen, this may in certain circumstances lead to a failure to establish this certainty, and in others, to a delay. For some, the sight of the body transformed by death is an important but transitory image which allows an effective internalisation of the concept that the familiar, palpably alive physical presence of the loved one no longer exists in the external world and that memories of this are all that remain.

Following the Zeebrugge disaster, many people (three times as many as were actually on board) were reported as missing, possibly on the capsized ferry. Many of these had been missing for years. Those who had long term 'missing bodies' therefore seemed to need to create an end for their loved ones. Many bodies were not recovered until five weeks had passed, and during this period many bereaved were plagued by thoughts and dreams that the loved one had never been aboard, or had swum ashore and was wandering in an amnesic state. (After the Bradford fire, relatives thought that the loved one had in some strange way gone away to 'think'.) One mother was convinced that her 2-year-old had floated ashore and was being looked after by a family on the Dutch or Belgian coast – she begged for a picture to be placed in local newspapers so that he might be recognised. Relief only came when his body was recovered and buried. Such a fantasy was still present in the grandparents of a 7-week-old baby whose body was not recovered at the time of the first anniversary. In another family, whose adult son was never found, the parents still at one year spoke of his 'coming home', as if despite their intellectual acknowledgement that he was dead,

and that it was his corpse they spoke of, at a deeper level they still expected him to walk through the door. They felt that the task of being parents was not complete until they had buried him. The counsellor who worked with these families described the problem thus: 'it was as if they did not know whether they could grieve or not; they knew what the task was, but they did not have the means to complete it'.

Naturally, the need of the relatives that every effort be made to recover lost bodies is overwhelming. When the oil rig *Alexander L. Keilland* was wrecked in the North Sea in 1980, thirty-six of the 123 deceased were not recovered. An initial attempt to right the rig failed, and only after three and a half years of uncertainty and campaigning on the part of the bereaved was the rig successfully righted. Only six bodies were found, and the rig was hastily sunk at sea.

For Norwegians (112) 'it has been an unbreakable rule for families and relatives to search for people lost in accidents'. This is based on the tradition that those who are drowned and not buried in a churchyard are unable to rest in peace, and return to haunt the living, drifting restlessly and vengefully across the ocean or along the shores. The characteristics of these ghosts include the following:

- they cry dreadfully;
- they search restlessly;
- they cling to and press people down; and
- they strike with sickness.

These can be seen as projections of the feelings and experiences of the bereaved for whom the 'certainty of death' of the loved one has not been established.

The seven bodies not recovered from the mud torrent that destroyed Buffalo Creek in 1972 left the remaining residents with an unspeakable horror, collectively held – 'people up and down the hollow live in fear that those remains will suddenly reappear one day' (81). One man found it difficult to look at the creek 'because he half expects to see a decomposed hand reaching out of it'. A devoted gardener gave up her hobby because her first attempt at planting a rosebush after the flood unearthed a bone she thought might be human. A 9-year-old dug up a set of false teeth and suffered from nightmares thereafter.

Another problem stems from the fact that the badly damaged body may bear no resemblance to humanity, much less the physical appearance of the loved one. The Bradford fire left welded bones in pools of melted human fat. The relatives did not see these sights. For one family identifying effects, the following scene was enacted:

> A constable carefully placed the contents of a plastic bag on the table. There was an assortment of charred, blackened articles; a watch strap, a small piece of string vest, a corner of shrivelled cardigan, a silver ring, indistinguishable from any other. In slow motion the relatives fingered the remains. When they got to the end, they started again. There was some nodding and shaking of heads, some whispers, sighs, staring. There were no tears – it was silent. Twenty minutes later they agreed he was dead. 'He did wear a cardigan ... he had a watch ... he always wore a string vest'. We left in silence (300).

With scanty evidence, the family had attempted to create certainty, a certainty which proved to be frail, for many such were left wondering 'Who was in that coffin?', or 'Was there anything in that box?' This is more than denial, this is doubt. Whereas denial gainsays the facts, doubt has a logical edge. The computer-aided precision of scientific detective work in identification is not emotionally satisfying. Some bereaved develop a 'questioning syndrome' (130), where doubt about the identification, or even the death, runs rife, and may block progress to resolution.

After the Zeebrugge disaster, bodies recovered immediately were mostly identified visually by relatives. Two patterns were apparent – one small group of relatives made premature identifications of bodies that were in fact not those of their loved ones. Others had to make repeated visits, even when the physical damage to the corpse was not extensive, allowing subtle changes in the body to block acceptance of reality. Thus some relatives need immediate certainty of the death, at the cost of the truth, whilst some prefer to postpone this certainty to allow room for hope.

The anguish associated with viewing the mutilated remains of a loved one is reflected in the words of a bereaved parent on Buffalo Creek:

> My son was crushed up so bad, I went about four times trying to identify him. His head was just smashed to jelly. He had just a little bit of sideburn left, where you could tell it was him. All the bodies had swelled up so bad, you had to just keep looking and looking (81).

In many circumstances relatives may be prevented by well-meaning officials from seeing such sights. Following the Granville train disaster (290), thirty-six of the forty-four bereaved interviewed had not seen the body. The majority of those who had were widowers, and of eight, only one regretted this. Overall, those who saw the body had a more satisfactory outcome in terms of resolution of grief than those who did not. Twenty-two of the thirty-six who did not view regretted this, countering the argument of

'remember him how he was' with the assertion that 'nothing could be as bad as my fantasies of how he looked'.

In the first year after the Zeebrugge disaster (133) 19 per cent of a group of bereaved relatives said that they had viewed the bodies of the deceased. Interviewed between three and twelve months after the disaster, this group was significantly worse off on measures of general distress and anxiety. This of course conflicts with the picture of those bereaved by the train disaster. However, the two sets of interviews were carried out at different times – in the first year (Zeebrugge) and the second year (Granville) – and the difference possibly lay in this factor.

Indeed, a different picture appeared for the Zeebrugge bereaved at thirty months (134). The bodies recovered immediately, on the first night, were largely unchanged in appearance, but others, who spent six weeks under water before recovery, were changed. However, the reactions of those whose loved ones were recovered immediately, and those whose loved ones were recovered later, proved similar. Those who viewed bodies which were more damaged were not psychologically worse off. Whilst there were no real differences in overall psychological symptoms or measures of grief between those who viewed and those who did not (in contrast with the first year figures), significant differences were found on measures of trauma. Intrusive symptomatology (unpleasant, intrusive images and thoughts) was significantly lower in those who had viewed, as were symptoms of mental avoidance.

It would appear therefore that the one thing that might be feared, that is an increase in intrusive imagery or thoughts about the loved one and the events in which they met their death, did not occur in those who viewed. The notion that trauma and grief are separate entities is supported by these findings. Viewing had a positive effect on the psychological impact of trauma, but not on grief. When contrasted with the picture for Zeebrugge bereaved in the first year, it seems possible that those who view may be more distressed in the short term, but less distressed in the long term.

Following the Granville disaster, less than 10 per cent said they regretted viewing, and nearly two-thirds regretted not viewing. Thirty months after the Zeebrugge disaster, 11 per cent regretted viewing on the first night as against none at six weeks; 40 per cent regretted not viewing on the first night and 52 per cent at six weeks. It seems therefore a consistent picture that the decision to view is rarely regretted (particularly when thought through, as were decisions to view bodies recovered at six weeks), whilst the decision not to view is regretted by roughly half. Thirty-three per cent of the bereaved felt prevented from viewing.

People view bodies primarily not to identify them to the authorities, but to reassure themselves that it is indeed their loved one, and more simply for the sake of saying 'goodbye'. These reasons, and the process of viewing,

would be familiar to those who work in casualty departments, or in maternity wards where babies may be stillborn, sometimes malformed (275).

It cannot be assumed that it is the process of viewing which leads to the lower levels of psychological symptoms. It may be that those who are more 'hardy' request to view and would have fewer symptoms anyway. However, for practical purposes, those who choose to view can do so with little psychological risk in the majority of circumstances. One important qualifier is that currently we know little of the effects of viewing bodies which are so badly damaged that they bear little resemblance to human beings at all. Perhaps this is an individual matter, in that a relative might be just as happy to view a relatively undamaged arm whilst the remainder of the severely damaged body remains covered. Good practice in relation to the viewing of bodies is reviewed in Chapter 5.

The potential consequences of these dilemmas is reflected in the story of one mother, who lost her son in the Zeebrugge disaster, and who began to wonder whether it was indeed her son's body in the grave. She had been advised not to view him. Attendance at the inquests failed to reassure her that it was her son who had been identified. She was invited to see photographs of his body after death. The first she viewed was one taken after the morticians had worked on him. She turned the photo round as if she could not work out which way was up. 'That is his forehead', she said, with some doubt in her voice. She was asked if she wished to see a photo of him as he was recovered, and was given a full length photo of him lying prone after his body had been hosed of mud. 'That's my boy – he could just be asleep in the garden now', she said, kissing her finger, putting it to the face in the photo, and handing it back.

The search for understanding

As with survivors, the bereaved need to develop understanding of the meaning of the tragic events, and may begin with the reasons for the death and the events surrounding it. 'The mourner obsessively reconstructs events in an effort both to comprehend the death and to prepare for it in retrospect' (252).

Information culled from death certificates is an initial clue to answering questions about the cause and nature of death, such as whether the loved one might have died painfully or not. Similarly, attendance at the inquest may bring answers to many questions, from information from post-mortems, or witness statements. One family who lost a son in the Zeebrugge disaster were able from this information to retrace his last steps and stand at the point where he met his death on an identical ship. Similarly there is a need to find out from other survivors what the loved one was doing when they died, such as whether they were involved in rescuing people, which may give more meaning to the senselessness of the loss.

Multiple loss

The father of five children who died together in a house fire wrote the following (233). 'It was a disaster, it was untidy, it was illogical, horrible and shocking, just as it was an affront to life. Reactions? Horror, shock, anger, utter disgust at life's cruelty.' It was nine years before he and his wife discussed in detail the events of that terrible day.

Those who are multiply bereaved are most depleted. They are coping with both the cumulative effects of several losses and the virtual eradication of social support networks, not only in terms of physical absence, but in terms of other relatives unavailable owing to their own grief. The bereaved person is thrown into a state of overload. 'Mourning for a given loved one is compromised by the concurrent crisis of the ongoing stalled, or delayed mourning for the other loved ones' (252). A cycle of incomplete grieving for each individual is set up, the unfinished business from grieving one preventing the completion of grieving for another. The bereaved person is faced with a variety of dilemmas. How can these loved ones be prioritised in grieving? How can they be differentiated?

PATHOLOGICAL GRIEF

In the follow-up of bereaved from the Granville train disaster (290), a hierarchy of risk was established. Most at risk in terms of poor resolution of grief were mothers losing children (aged up to their early twenties) and next were fathers in the same position. Intermediate were widows, with widowers faring best. Having a supportive social network, seeing the body, and receiving an intervention from an experienced counsellor tended to mitigate distress, but impressions gained from speaking to many of the families fifteen months after the event, particularly those who had lost young family members, indicated that 'many had not got over the loss, nor ever would, and, from what some of them said about their reaction at the time, it was clear that no amount of intervention at the time would have made any difference. There were people who could not or would not let go of the lost person and did not want to be assisted to do this.' In another study of bereavement by disaster (53), the personal meaning of the event proved to be of great importance. When the relationship was perceived as central, and the death as preventable, an intense and prolonged grieving process was observed.

The strong reactions of parents to the deaths of young adults give a good example of the violation of meaning that the bereaved experience. A young adult will have gone through the separations and struggles of adolescence, to become a person in their own right. The parent, perhaps approaching middle life, comes to see the child as their 'immortality', a representation of

themselves which will survive their own death. With the young person gone, their immortality is gone. They may feel that their life has now had no meaning, or one which was only temporary. Nor, being at the age they are, is it often possible for such parents to have another child. One father in his fifties, who lost his only son in the Zeebrugge disaster, had supported him through university (he was in his last year when he died), their plan being that as soon as he qualified he would join his father's business. With the years, he would take over, and his father would retire. Now the business would not survive his own death, the father felt that there was no point in continuing it at all. The fact that he had a surviving daughter did not alter this feeling.

Other studies of those experiencing unexpected bereavement reinforce this picture. Those whose loved ones die suddenly and unexpectedly show a higher level of physical and psychiatric illness than those bereaved by expected deaths (198): 44 per cent of such a group (199) experienced intense grief with a high level of anxiety, and a lesser level of depression. Guilt was problematic for a number, with widows concerned about what they could have done to prevent the death of their husbands, and parents wondering if they had been good parents and if they had done enough for their children. Failure to view the body led to a longer initial period of denial. The loved one's grave became of great importance: 22 per cent visited the grave daily at first, and three-quarters of this group continued to do so at the two-year point. Those who had visited the grave once a week in the beginning did so once monthly at this stage. These visits were consciously motivated by a need to honour the memory of the deceased, to come as close as possible to them in order to mitigate the sense of abandonment, to try to understand what had happened, and to satisfy a need for activity. Unconsciously, these visits may well represent a search for the deceased, and hence represent denial.

At the start of this section it was suggested that trauma and grief overlap and interact. Trauma may clearly impede grieving. This is probably for four main reasons:

1 Re-experience phenomena, such as traumatic imagery concerning the death, may be triggered by memories of the deceased. Indeed, 'traumatic re-experiencing may replace grief-associated thoughts of the deceased' (227). The ways in which memories of the dead person are transformed by the process of normal grieving may therefore be blocked.
2 Post-traumatic rumination about the circumstances of the death, its cause, or real or imagined responsibility for it may preoccupy the bereaved, blocking normal grief-work.
3 Post-traumatic avoidance will prevent exposure to stimuli which normally trigger grieving and the extinction of grief.

4 Post-traumatic emotional numbing, leading to detachment, will prevent opportunities for supportive interactions with others which, amongst other things, allow for discussion which facilitates emotional processing of grief.

Bereavement is 'excluded from significant diagnoses' under DSM-IV (288). 'Even if a patient meets all the criteria for depression, DSM discourages us from making that diagnosis if the person has been bereaved.' Given that the diagnosis of PTSD is based upon etiology, the occurrence of a causative event, it seems positively neglectful that such a well-recognised stressor as bereavement should not be acknowledged as being causative of a cluster of symptoms which can be sufficiently disturbing to emotions, thoughts and behaviours to warrant formal recognition as a significant disorder in its own right. ICD-10 'does not mention bereavement as an exclusionary factor in diagnosing depression, or PTSD, and almost totally ignores grief'. It categorises grief-related problems under the heading of adjustment disorder, and under that of prolonged depressive reaction if lasting longer than six months. This, however, is only a 'mild depressive state'. DSM-IV suggests that

> Bereavement is generally diagnosed instead of Adjustment Disorder when the reaction is an expectable response to the death of a loved one. The diagnosis of Adjustment Disorder may be appropriate when the reaction is in excess of, or more prolonged than what would be expected.

Only after two months is bereavement allowed to be considered as a major depressive episode, if it persists in sufficient intensity. Although it is acknowledged that there are features which differentiate grief from depression, no appropriate alternative is provided. As it has been succinctly put (288), 'people may grieve, or be depressed, or both'. The major diagnostic systems fail to address this properly.

Outside of the major diagnostic systems, two sorts of attempts to classify pathological grief can be observed: one based loosely on causation, and one based loosely on its characteristics. On the basis of a longitudinal study (240), three common patterns, or syndromes have been described:

1 The unexpected grief syndrome. Following the sorts of unexpected and untimely deaths typical in disaster, the intense experience of shock and disbelief delays the full emotional reaction and blocks moderate to high levels of anxiety. 'Typically, the grieving process is complicated by a persisting sense of the presence of the dead person, feelings of self reproach, and feelings of continued obligation to the dead which make it hard for the bereaved to make a fresh start' (86).

2 The ambivalent grief syndrome. Following a death in a relationship where there has been considerable ambivalence, the initial reaction may be one of relief, there is little felt need to grieve, and anxiety levels may not be high. As time passes, intense pining and despair emerges, reactions becoming more prolonged and self-punitive in nature. 'The bereaved may feel compelled to make restitution for their failure, but see no satisfactory way to complete the process of grieving. These two types of reaction seem to account for most of the delayed griefs which are seen in psychiatric settings' (240).
3 Chronic grief. Following relationships characterised by dependence or clinging, the grief, expressed in full from the outset, endures for an abnormal length of time. 'Surprisingly, it is not always the survivor who was the more dependent member' (238).

These three grief syndromes may occur in any combination.

Other attempts to describe morbid grief have focused on the observable behaviour of the bereaved (182). Again, three patterns have been described:

1 Avoidance. Phobic avoidance of persons, places or things related to the deceased, combined with extreme guilt and anger about the deceased and the nature of their death often results in delayed grieving. A study of those bereaved by the Zeebrugge disaster (135) confirmed the notion that avoidance and denial are central to prolonged grief reactions as well as to post-traumatic reactions. Avoidance was strongly associated with all factors of a measure of grieving, whereas intrusion was only related to a reduced range of factors.
2 Idealisation. Here, grief and guilt are absent, but anger about the deceased and their death is usually present. This anger is directed at other people, places or things, and not at the deceased, who is idealised.
3 Prolonged grief/physical illness. The third pattern is of prolonged grief coupled with physical illness and recurrent nightmares in which the deceased is seen as alive. The illnesses are generally those which are seen as stress related, or exacerbated by stress, such as hypertension, diabetes, duodenal ulcer and asthma, and a diagnosis is often made of reactive depression.