Preface to the Paperback Edition

[This] subject (the traumatic neuroses) has been submitted to a good deal of capriciousness in public interest. The public does not sustain its interest, and neither does psychiatry. Hence these conditions are not subject to continuous study, but only to periodic efforts which cannot be characterized as very diligent. Though not true in psychiatry generally, it is a deplorable fact that each investigator who undertakes to study these conditions considers it his sacred obligation to start from scratch and work at the problem as if no one had ever done anything with it before.

—Kardiner and Spiegel (1947, p. 1)

The hardcover edition of this book, published in 1996, represented an attempt to collate the knowledge that had emerged since the introduction of posttraumatic stress disorder (PTSD) into DSM-III in 1980. The introduction of this diagnosis triggered a resurgence of interest in the effects of specific traumatic events such as disasters, war, and interpersonal violence. By the mid-1990s, a sufficient body of literature had emerged to create a consensus about areas such as etiology and treatment. Today, this literature remains the foundation on which current understandings of PTSD are built. In some regards, the major developments of the last 10 years have fleshed out of some of the more specific scientific domains, particularly in the areas of epidemiology of community samples and neuroimaging.

In the area of epidemiology, it has become increasingly apparent that PTSD is a more common disorder than previously anticipated and that the disorder is associated with a substantial level of disability. Ronald C. Kessler, Principal Investigator of the National Comorbidity Survey, has concluded that major depressive disorder and PTSD account for the major burden of disease associated with mental disorders. This finding is of particular significance, given that depression is predicted by the World Health Organization to have the second highest burden of disease by the year 2020. These data from community samples are compelling because these individuals are not generally involved in compensation claims, an argument that is often used to negate the validity of the research into PTSD. Furthermore, the prospective investigation of various

populations identifies PTSD as only one of the outcomes following traumatic events. Major depressive disorder and substance abuse are particular morbidities commonly arising as an outcome of exposure to traumatic events.

These observational studies further reinforce the importance of traumatic events as a cause of substantial morbidity of mental disorders in our communities, an association that is very commonly missed in both general practice and mental health settings. Furthermore, it is also being shown that PTSD is a common diagnosis among populations with schizophrenia and bipolar disorder, accounting for a significant burden of behavioral disturbance and substance abuse. The chronically mentally ill are often the victims of violence, only further adding to their burden of suffering and disability.

The continuing developments in neuroimaging and the outcomes of the work on the brain during the decade of the 1990s have also contributed much to our understanding of PTSD. PTSD is a condition that severely disrupts individuals' capacity to perceive, represent, integrate, and act on internal and external stimuli because of major disruptions in the neural systems associated with attention, working memory, and the processing of affective stimuli. These findings can be integrated with a broader understanding of the functioning of the brain. No longer are we dependent on rather primitive models of cortical and subcortical neural networks derived from stroke or head-injured patients. We now understand that the brain has both principal and associated neural networks that contribute to brain processes. Understanding their functioning in normal people allows us to better understand the underlying psychopathology of PTSD because we can begin to highlight and illuminate the neural networks that are dysfunctional in this condition. In many regards, PTSD should be considered as an information-processing disorder that interferes with the processing and integration of current life experience. Individuals with this condition become overwhelmed by both the extraordinary overload of information associated with the traumatic memory, which they are then unable to integrate, as well as the lower demand characteristics of the day-to-day into environment. The disruption of memory and concentration and the emotional numbing in PTSD are indicative of broader problems in managing and processing day-to-day stimuli. These findings would support the classification of PTSD as a dissociative disorder, rather than as an anxiety disorder.

The developmental stage at which an individual is traumatized has a major impact on the degree to which mind and brain are affected. In addition, more and more research has accumulated that for both children and women, trauma inflicted by intimates, parents, and partners has the most profound long-term consequences. Traumatization within attachment relationships has profoundly different impacts on affect regulation, self-concept, and management of interpersonal relationships than do disasters and motor vehicle accidents.

The increased understanding of the effects of traumatic stress has done nothing to change attitudes to violence and tragedy within our community.

Despite increasing recognition of the importance from a public health perspective of the circumstances of trauma in the areas of substance abuse and social disadvantage, few attempts have been made in the political and social arenas to try and lessen the impact of these forces in our communities. The cycles of violence that drive the endemic civil unrest in many third world cultures can only be broken by enlightened political leadership that is willing to think beyond simple formulas of right and wrong, good verses evil, and punishment and revenge. Terrorism exists because of social inequalities and the scars that old prejudices ferment. Fundamentalism of any ilk is the antithesis of enlightenment. We forget that the modern world was built upon the rejection of authority, which opens the questioning and challenge that are the domains of free thought. The issues articulated in Chapter 3 remain as pertinent today as they were at the time of the original publication of this book.

In many regards, this field is becoming the victim of its own success. There has been a tendency to declare that a particular treatment of a highly preselected sample should be declared the "evidence-based" "treatment of choice" after having been proven to be superior to a waiting-list control group. This premature closure violates the essence of scientific inquiry and runs the danger of stifling multidimensional explorations of treatment efficacy. Openness to a variety of ideas and paradigms has traditionally played a central role in the energy, vigor, and creativity of this field during its first decades. This concern is particularly relevant as long as the findings of neuroscience, attachment, and cross-cultural research remain isolated from an increasingly prescriptive approach to intervention and treatment.

This book is divided into six parts: (I) Background Issues and History; (II) Acute Reactions; (III) Adaptations to Trauma; (IV) Memory: Mechanisms and Processes; (V) Developmental, Social, and Cultural Issues; and (VI) Treatment. This book ends with a chapter on conclusions and future directions.

PART I. BACKGROUND ISSUES AND HISTORY

Chapter 1 examines the reaction to trauma as a process of adaptation over time. Rather than a unitary disorder consisting of separate clusters of symptoms, PTSD needs to be seen as the result of a complex interrelationship among psychological, biological, and social processes—one that varies, depending on the maturational level of the victim, as well as the length of time for which the person was exposed to the trauma. Central to understanding these processes is awareness of the nature of traumatic memory and its biological substrates. In this and many other chapters of this book, we explore various facets of the psychological and biological processes that lead to the dominance of the trauma in memory and to its maintenance over time. In Chapter 2, we discuss how the issue of responsibility, both individual and shared, is at the very core of how a

society defines itself. We discuss how different societies have taken very different approaches to the question of whether the inescapably traumatic events that befall its members become a shared burden, morally and financially, or whether victims are held responsible for their own fate and left to fend for themselves. This opens up the issue of human rights: Do people have the right to expect support when their own resources are inadequate, or do they have to live with their suffering and not expect any particular compensation for their pain? Are people encouraged to attend to their pain (and learn from the past), or should they cultivate a "stiff upper lip," which does not allow them to reflect on the meaning of their experience? The resistances to the acknowledgment of trauma are explored, as are the price and the benefits of denial.

In Chapter 3, we discuss how the issues raised in Chapters 1 and 2 have been conceptualized over the past century and a half, and we examine the troubled relationship of the psychiatric profession with the idea that reality can profoundly and permanently alter people's psychology and biology. Mirroring the intrusions, confusion, and disbelief of victims whose lives are suddenly shattered by traumatic experiences, the psychiatric profession has periodically been fascinated by trauma, followed by stubborn disbelief about the relevance of patients' stories. Psychiatry has periodically suffered from marked amnesias, in which well-established knowledge was abruptly forgotten and the psychological impact of overwhelming experiences was ascribed to constitutional or intrapsychic factors alone. From the earliest involvement of psychiatry with traumatized patients, there have been vehement arguments: Is the etiology of these patients' complaints organic or psychological? Is trauma the event itself or its subjective interpretation? Does the trauma itself cause the disorder, or do preexisting vulnerabilities? Are these patients malingering and suffering from moral weakness, or do they suffer from an involuntary disintegration of the capacity to take charge of their lives? Should people examine their reactions to the trauma in order to overcome it, or should they be helped to ignore it and go on with their lives? The history of these arguments is summarized in this chapter, and the status of current knowledge is presented in the rest of the book.

PART II. ACUTE REACTIONS

The two chapters of Part II examine the progression from acute traumatic response to long-term outcome, taking into account issues of vulnerability, temperament, and adjustment. In response to acute trauma, people may experience a range of reactions, including dissociation. Acute stress disorder, a new category in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), may or may not progress to full-blown PTSD. The symptoms of PTSD emerge as part of a longitudinal process of adjustment to the effects of trauma. These chapters examine the merits of the ongoing debate about whether PTSD

is a normal or abnormal response to traumatic stress and about when clinicians should intervene. Furthermore, these chapters explore what we know about long-term effects of acute trauma, so that clinicians can more accurately predict eventual impairment and disability.

PART III. ADAPTATIONS TO TRAUMA

Part III begins with a chapter that delineates the background issues for the development of PTSD as a diagnostic category in DSM-III and DSM-IV. Since the placement of psychiatric problems within diagnostic systems determines how clinicians and investigators conceptualize the inner structure of a disorder, this raises the very important question of whether PTSD is most appropriately classified as an anxiety disorder. This chapter examines the rationale for establishing a separate axis for stress disorders in the DSM system of diagnostic classifications, which could include dissociative disorders, adjustment disorders, grief reactions, and a variety of characterological adaptations.

The next two chapters of this section—Chapter 7, on the nature of the stressor, and Chapter 8, on vulnerability and resilience—examine the interactions between external events and subjective response. In this regard, the meaning of the trauma, the physiological response, preexisting personality structures and experiences, and the degree of social support are all critical factors in a person's ultimate response to trauma. The stressor criterion defines who is and who is not included in the diagnosis, and hence this determines the prevalence of PTSD. Chapter 8 summarizes the epidemiological studies conducted to date, which emphasize the importance of traumatic stress as a public health issue. It further examines the relative importance of the traumatic event itself, in contrast to vulnerability or predisposing factors. The conclusion is that issues of predisposition and vulnerability may be more relevant to understanding recovery from acute symptomatology and the individual's long-term resilience than to understanding acute patterns of response to a stressor. Vulnerability factors may also define the patterns of comorbidity, which play an important role in chronic PTSD. Critical in these considerations is the emergence of chronic patterns of adaptation, in which lack of involvement in current reality, rather than preoccupation with the past, are the most pathological features.

Chapter 9, on the complex nature of adaptation to trauma, examines the intricate ways in which psychological and biological processes interact with development to produce a range of problems with self-regulation, attention, the ways people view themselves, and the ways they make their way in the world. Chronic trauma is associated with dissociative disorders, somatization, and a host of self-destructive behaviors (e.g., suicide attempts, self-mutilation, and eating disorders). In addition, trauma at different developmental levels has different effects on further personality development. This theme of complex-

ity of adaptation continues in Chapter 10, which examines the biology of PTSD, including both hormonal and autonomic nervous system dimensions. Topics covered include the unusual patterns of cortisol, norepinephrine, and dopamine metabolite excretion; the role of the serotonergic and opioid systems; and receptor modification by processes such as kindling. This chapter also examines the involvement of central pathways involved in the integration of perception, memory, and arousal, as well as the impact of these central pathways on patterns of information processing in PTSD.

Part III concludes with a chapter on research methodology, which discusses the currently available diagnostic and assessment tools that are helpful in both clinical and research settings. There is often conflict between clinical realities and research paradigms in PTSD. Because of forensic as well as research issues, the problem of a valid and reliable diagnosis is of paramount importance. This question is given further relevance by the fact that a number of studies demonstrate low rates of PTSD in exposed populations. Whereas strict standards of diagnosis for PTSD are essential for good research, broader definitions may be helpful in clinical settings to assess the full extent of disability. Over time some people's PTSD may become subclinical, and yet it may continue to influence their level of functioning.

PART IV. MEMORY: MECHANISMS AND PROCESSES

Because it would be unethical to conduct laboratory experiments that are so overwhelming as to cause subjects to develop PTSD, research on the nature of traumatic memories needs to rely on reports of traumatized individuals, on biochemical challenge studies, and on inferences from animal investigations. Unfortunately, it has become common for experimental psychologists to make undue inferences from memories of ordinary events in the laboratory to memories of rapes, assaults, and murder. Chapter 12 describes that in recent years, research with traumatized individuals has been able to show that traumatic memories are qualitatively different from memories of ordinary events, and that amnesia coexists with vivid recollections. Brain imaging technologies have also made it possible to gain insights into the ways traumatic memories may be organized in the central nervous system. In Chapter 13, on information processing and dissociation in PTSD, we examine how trauma affects an individual's ability to perceive and integrate the overwhelming experience. Arousal and dissociative responses during the trauma lead to fragmentation of the experience. This chapter focuses both on the dissociative responses during traumatic experiences and on the continuing role of dissociation in subsequent adaptation, including the organization of experience in dissociated fragments of the self, such as occurs in dissociative identity disorder.

PART V. DEVELOPMENTAL, SOCIAL, AND CULTURAL ISSUES

Trauma and the Life Cycle

Trauma in childhood can disrupt normal developmental processes. Because of their dependence on their caregivers, their incomplete biological development, and their immature concepts of themselves and their surroundings, children have unique patterns of reaction and needs for intervention. Chapter 14 addresses the fluidity of children's schemata and the role of their caregivers in modifying the trauma response. On the other end of the life cycle, in the elderly, trauma has its own long-term impact: Recent research has shown that as external and internal resources diminish, trauma may renew its hold over people's psychology. Long-term studies of traumatized individuals show that although they may suffer from subclinical PTSD in middle age, memories of the trauma come once again to dominate their lives in senesence. Chapter 15 discusses adjustment in old age after an earlier trauma, such as concentration camp incarceration or combat experiences, as well as the issue of lack of flexibility or capacity to repair damage with increasing age.

Social and Cultural Issues

The history of PTSD has been intimately entwined with the ways legal systems have dealt with disability and pension entitlements. Legal systems have played a major role in defining how societies acknowledge the association between traumatic events and psychiatric symptomatology. Chapter 16 deals with the ways in which legal systems in North America, Europe, and Asia have approached these questions. Chapter 17 then explores the possible role of cultural issues in PTSD. Although this is an area that has received very little attention, the cultural context of the trauma is an important dimension because the meaning of trauma is often culturally specific, and the social and religious rituals surrounding loss and disaster have an important healing role in both individual and community trauma. This chapter also discusses the specific functions of social supports in minimizing the impact of trauma, and the protective role of attachment.

PART VI. TREATMENT

Well-controlled treatment studies are difficult to conduct, since there are always more variables that affect outcome than can be controlled. Nevertheless, PTSD research has provided some excellent treatment outcome studies from widely divergent theoretical orientations—cognitive-behavioral therapy,

psychodynamic therapy, psychopharmacology, and eye movement desensitization and reprocessing (EMDR). In actual practice, most clinicians use an eclectic approach, in which they must constantly reevaluate what is being accomplished. They must also continually evaluate what particular interventions are most effective for which trauma-related problems. For example, the core PTSD symptoms (intrusions, numbing, and hyperarousal), occupational disabilities, dissociative phenomena, and interpersonal problems and alienation may all need different approaches. Therefore, the treatment must in large part be derived from clinical judgment, and must draw from the available knowledge about the etiology and longitudinal course of this condition.

As we note in Chapter 18, the overall aim of therapy with traumatized patients is to help them move from being haunted by the past and interpreting subsequent emotionally arousing stimuli as a return of the trauma, to being present in the here and now, capable of responding to current exigencies to their fullest potential. In order to do that, people need to regain control over their emotional responses and place the trauma in the larger perspective of their lives—as a historical event (or series of events) that occurred at a particular time and in a particular place, and that can be expected not to recur if the traumatized individuals take charge of their lives. The key element in the psychotherapy of people with PTSD is the integration of the alien, the unacceptable, the terrifying, and the incomprehensible; the trauma must come to be "personalized" as an integrated aspect of one's personal history.

The therapeutic relationship with these patients is often the cornerstone of effective treatment. It tends to be extraordinarily complex, particularly since the interpersonal aspects of the trauma, such as mistrust, betrayal, dependency, love, and hate, tend to be replayed within the therapeutic dyad. Dealing with trauma in therapy confronts all participants with intense emotional experiences, ranging from helplessness to intense feelings of revenge, from vicarious traumatization to vicarious thrills.

The other chapters of this section examine specific therapeutic responses, starting with preventive strategies. The military and other emergency services have learned that it is possible to modify people's behavior during extremely stressful situations in such a way as to optimize their survival behaviors. The possibilities for preventing severe posttraumatic reactions have become a major focus of clinical efforts in the last decade, as described in Chapters 19 and 20. Critical incident stress debriefing has been proposed as a major vehicle for modifying the stress reactions of emergency service workers. Despite the strength of the advocacy for these services, there has been little systematic research examining their value. Much of the treatment literature about PTSD has focused on the management of acute patterns of distress or very chronic patterns of adjustment, such as those seen in Vietnam veterans. However, the increasing recognition of traumatic stress has led patients to present within weeks of the development of acute symptomatology. The absence of stable

symptom patterns and extreme degrees of physiological hyperarousal at this stage mean that there are unique problems in the treatment of acute reactions; Chapter 21 describes these.

Of the various proposed therapies, the effects of cognitive-behavioral treatments have been most thoroughly examined, and these are discussed in Chapter 22. There is a growing body of systematic research demonstrating the ability of such treatments to assist in alleviating the broad range of PTSD symptoms. However, because uncontrolled exposure may have negative consequences, and since traumatized people with very high levels of avoidance are often most reluctant to expose themselves to their traumatic memories, there remain important questions about the necessary technical skills and timing for these forms of treatment.

The hyperarousal, sleep disturbances, and embeddedness in the trauma of patients with PTSD make effectve pharmacological treatment essential, as described in Chapter 23. During the last 5 years, a number of controlled trials have shown that some antidepressants and serotonin reuptake inhibitors can be quite helpful in providing symptomatic relief. The multiplicity of PTSD symptoms suggests that psychopharmacological interventions need to be targeted at specific subsets of symptoms.

Psychodynamic treatment has also made important contributions to the treatment of traumatized patients. Its most important contribution has been its focus on the understanding the subjective meaning of the traumatic event, and the process of (and barriers to) the integration of the experience with preexisting attitudes, beliefs, and psychological constructs. Chapter 24 provides a detailed description of psychodynamic treatment of PTSD.

The multidimensional nature of PTSD means that in clinical reality, a combination of several different approaches is often needed. Dealing with traumatized people often requires a staged process of treatment that is responsive to how much the victims can tolerate. The chronicity and severity of PTSD, and the reluctance of many victims to involve themselves in the treatment process, mean that various approaches to managing this condition need to be explored. The specific nature of the therapeutic relationship is often a critical variable in outcome. New treatments of PTSD are regularly proposed, and these deserve careful clinical trials to test their efficacy. All these factors are discussed in Chapter 25.

CONCLUSIONS AND FUTURE DIRECTIONS

The final chapter of the book integrates common themes and attempts to signal the future issues and directions of clinical care, service delivery, and research in the area of trauma. More than most areas of psychiatry, the field of trauma has reflected not only the established knowledge base of the disci-

pline, but also a diverse range of social and political factors. The way victims of trauma are treated is often an indicator of society's general attitude to promoting the general welfare of its citizens. Much remains to be learned about how trauma affects people's capacity to regulate bodily homeostasis; how, years after the trauma has ceased, memories continue to dominate people's perceptions; and how victims can best be helped to reestablish control over their lives.

Many questions that have been explored in this book continue to be challenges for the future. How do the biological effects of trauma continue to affect people's capacity to think and make sense out of current experience? To what degree can psychological interventions reverse a disorder with such strong biological underpinnings? Do patients benefit from getting compensation payments, or does it impair their recovery? What is the role of predisposition, and what are the implications of preexisting vulnerabilities for treatment? To what degree is the essence of trauma the external reality or the internal processing of that event? Should treatment focus primarily on the trauma itself, on secondary adaptations, or on learning to pay attention to the here and now? Finally, possibly the most important questions that deserve intense study are these: What are the natural mechanisms that allow some individuals to face horrendous experiences and to go on? And what can we learn from them to help others do the same?

The past has shown how fragile existing knowledge can be, and how psychiatry is prone to become trapped in prevailing paradigms without being able to see their shortcomings. The unknown is the worst enemy of knowledge. This book is a body of work to be criticized and reacted against; only a critical reading will help us further define what we do not know, and determine the scope of future explorations.

REFERENCE

Kardiner, A., & Spiegel, H. (1947). *War stress and neurotic illness.* New York: Paul B. Hoeber.