# Introduction: Inscribing Trauma in Culture, Brain, and Body

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## INTRODUCTION

We live in a world torn and scarred by violence. Globalization has increased the speed and scale of conflicts and catastrophes, but violence has been integral to the human condition from our earliest origins. We should expect, therefore, to find its traces in the design of our brains and bodies no less than in the weave of our communities.

Trauma has become a keyword through which clinicians and scholars from many disciplines approach the experience of violence and its aftermath. The metaphor of trauma draws attention to the ways that extremes of violence break bodies and minds, leaving indelible marks even after healing and recovery. But the notion of trauma has been extended to cover a vast array of situations of extremity and equally varied individual and collective responses. Trauma can be seen at once as a sociopolitical event, a psychophysiological process, a physical and emotional experience, and a narrative theme in explanations of individual and social suffering.

Within psychiatry, much recent work on the psychological impact of trauma has focused on the diagnostic construct of posttraumatic stress disorder (PTSD). The diagnostic criteria for PTSD include a history of exposure to a traumatic event and symptoms from each of three groups: intrusive recollections of the trauma event, avoidance of reminders of the event and emotional numbing, and hyperarousal (American Psychiatric Association [APA], 2000). Although PTSD is just one of many clinically recognizable responses to trauma that often co-occur, it has come to occupy center stage in research, writing, and clinical intervention. This focus is partly because the construct overlaps with animal models of fear conditioning that have allowed experimental studies to begin to tease apart underlying biological mechanisms. Clinically, the emphasis on PTSD reflects the fact that specific treatment interventions based on learning theory are effective in helping some sufferers. Culturally, the diagnosis of PTSD has been an

important move in the struggle to determine accountability for suffering and to seek restitution and redress. By connecting current symptoms and suffering to past events, the diagnosis of PTSD assigns causality and, to some degree, responsibility and blame.

Nevertheless, trauma covers a much larger and more ambiguous terrain than the construct of PTSD would suggest, contributing to individual and collective identities and the politics of memory. In this volume, we traverse some of this terrain to explore how different disciplines can contribute to deepening our understanding of the meaning, human consequences, and effective response to traumatic events.

## TRAUMA IN THE SURVIVOR'S WORLD

The FPR-UCLA conference on cultural, clinical, and neurobiological perspectives on trauma, from which most of the chapters in this book were drawn, ended with a panel of survivors who gave accounts of their experiences in Congo, Afghanistan, and Laos. The first, a woman who endured the Taliban regime in Afghanistan, spoke eloquently about the oppression her people suffered under both the Soviet occupation and the Taliban, and her own struggles adapting to life in the United States:

> We knew life would not be easy here because we were already aware of other Afghanis' living situation here. Still, to escape from a worse situation was not a bad idea. The new place had its own problems: no job, no income, getting new illnesses because of the new environment and living with . . . other people were stressful. The change of environment [and] an unknown future was just as bad as living in war in our country. . . . Coming to the United States of America we hoped to get relief. We did get a lot of relief – but it depends on each individual. We need time to melt into the new life and system. We need time to really forget what happened to us in the past. We need to overcome our past, our sorrows and sadness that have been observed in our mind and body, because we are not in a stable mental and physical situation and most of us are not yet able to forget everything easily. All these facts affected our lives here too, because we spend most of our lives in trouble [rather] than in comfort.

This woman had been in ongoing treatment for severe PTSD and associated depression. However, in her moving account, the clinical features of PTSD were not mentioned. Although there were veiled references to the violence she experienced and to continued suffering due to her inability to forget, her story was more about sadness, loss, and longing for her homeland.

The second speaker was a survivor of the civil conflict that swept over the Congo in the late 1990s. Her father, husband, and two children were killed by paramilitary gangs, and she was forced to flee to the United States. She too had symptoms of PTSD – intrusive memories of the massacres she had witnessed, recurrent nightmares in which she saw her murdered children – and depression over the losses she had suffered. Yet what she

chose to emphasize in this public recounting was the powerlessness and shame she felt as a refugee needing assistance.

> And emotional problem, also. . . . I worry very much. I feel insecure. I get like, it was like I lost my self-confidence, you know. For a long time I was a leader. And now for the first time it was like I became a child. I became vulnerable, and I began just to cry for nothing, many times, in front of [the doctor] . . . it was too much for me. It was too much. For the first time, I have to ask for money, I have to ask for food. People . . . think that you are stupid because you have not skill . . . you have nothing and you have nobody . . . everybody just rejects you here.

The third speaker was from Laos, a highly educated man with a doctorate from the Sorbonne, who had been a member of the Lao government, and who then had been imprisoned by the Pathet Lao regime for many years. He endured torture and deprivation in several prison camps and finally immigrated to the United States. Again, while his clinical history centered around the core symptoms of PTSD – which as a counselor in the trauma clinic working with other Lao survivors, he knew well – his main concerns lay elsewhere:

> So now I want to talk about my illness in terms of PTSD, what I have learned. . . . Personally, I think I am not a superman. Perhaps I still have some PTSD, but I do not have nightmares, almost never. But of course, sometimes I dream of prison life. . . . I dream of some prison scene. In general, I think it's ok for me for PTSD. But the most PTSD trait I have is, I think, is I can be startled very quickly, you know. Suppose somebody call me, especially an authority call me, for example, I can be startled. I don't know, you call me for what? Because in prison life, if somebody calls me it's for execution, you know . . . so here after my release if somebody calls me I can be startled a little bit again. . . . Also, when I see a place where there is plenty of food, I think automatically [of] my former inmate, because really we did not have food. . . . Also, I do not feel very confident. And I have a tendency to want to be [in] my own world. I cannot say I am a very strong person, no. Sometimes I want to be alone, I don't want to be with other people, I like my place, my own world, my place, and I stay in my place, and I'm happy because I was in prison for seven years. . . . Still, I keep something like this . . . and also I cannot support, I cannot bear for somebody to talk loud . . . that is my story. . . .
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> And if you ask me how I could survive? I think, of course, I was physically strong, but . . . the physical factor has a limit, I think . . . you can stand for seven years but you cannot stand . . . for 30 years. So I think . . . the most essential thing for me . . . is psychology. It means you have to think positive in prison, you are what you are, what you think. Ok, this is what you think: "Keep alive. . . . I am not what you think about me. I am not a bad person."
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> The second thing, I think, is my political education . . . because my background is political, and at that time because Communists told us our system, the social system, is the best in the world. . . . So I told myself, "Ok your system is good. But I do not agree with you. So I want to stay alive to see between your system and mine, which is the liberal system." . . . I told myself, "I want to see – you said 'one

thousand years' – I want to see if your system can stand in our lifetime," I told myself.

A third thing is my character. . . . So, you want me to die, but I don't want to die in prison. So I had to keep alive. And the day I get out of the prison, that day I am the winner, I told myself. That is my character.

The fourth, I think, is love. My wife . . . suffered a lot for me so I want to leave her my love, so I had to keep alive for my wife.

The fifth reason that I can keep alive, I think, is the human rights struggle in the world also, because at the time they released me, 1988, at that time socialism began to change a little bit. But I am realist also, for this reason.

What is clear from all of these accounts is that although the symptoms of PTSD may be identifiable across disparate cultures and contexts, the diagnostic construct captures only part of the experience and concerns of sufferers and survivors. This does not mean that constructs like PTSD have no clinical or scientific utility, but rather that they represent only one strand in a complex reality with biological, personal, social, and political dimensions.

Trauma names a type of situation or outcome, not a discrete disorder or single pattern of injury and response. How then are we to approach the forms of human suffering collected under the notion of trauma? The emphasis on PTSD casts a long shadow in current discussions of trauma, organizing experience, simplifying causal explanations, and directing attention to symptoms in ways that may give a useful focus for treatment, but that may also distort a complex human and social predicament. In this volume, we examine broader notions of traumatic events, experiences, and responses relevant to the concerns of clinicians, neuroscientists, and social scientists.

## A GENEALOGY OF TRAUMA

Despite the stark events it names, trauma is not a natural category but a culturally constructed way to mark out certain classes of experiences and events. The salient examples and cultural prototypes of trauma have changed over time, along with our ways of thinking about illness and suffering, our concepts of mind and personhood, and the moral politics of victimhood, blame, and accountability (Leys, 2000; Micale & Lerner, 2001). Trauma is a metaphor borrowed from the domain of medicine and extended to a wide range of experiences. Like any generative trope, the metaphor of trauma shapes our thinking in ways that are both explicit and hidden. The history of trauma, then, is not simply a story of the march of scientific, medical, and psychiatric progress toward greater clarity about a concept with fixed meaning, but a matter of changing social constructions of experience, in the context of particular clinical, cultural, and political ideologies.

The etymology of the word *trauma* goes back to the Greek word for wound. By the mid-1600s, *trauma* appears in medical literature to refer to bodily wounds, and this use of the term continues up to the present in medicine and surgery. Although trauma involves damage to tissue, the body has mechanisms of repair and healing that can restore its integrity and function, albeit often leaving scars. When physical trauma exceeds the body's capacity for repair, there may be lasting damage or death. Severe trauma can lead to a state of cardiovascular collapse, termed *shock*. This idea of shock as an overwhelming of the body's regulatory systems accompanies the notion of trauma throughout its medical history. Just as trauma to the body may result in a loss of physical function, trauma to the head or spinal cord, resulting in a shock to the nervous system, can lead to a loss of behavioral, psychological, or intellectual functioning. Throughout the medical history of trauma, the key concept is that a violent event can cause injury with structural damage to the body and its physiological systems, while also activating bodily systems dedicated to survival, recovery, and repair.

In the late 1800s, this notion of medical or surgical trauma was associated with new types of injury that emerged as unfortunate consequences of industrialization and the accelerating pace of modern life. Accidents in factories or on newfangled machinery and conveyances resulted in new kinds of trauma. The speed of travel itself was viewed as potentially traumatic, and individuals caught in railway accidents might suffer not only from physical injuries but also from a sort of physical shock to the nervous system that left them anxious and ill with "railway spine."

The application of the metaphor of trauma to psychic wounds dates from the late 1800s, and this extension of meaning is crucial for understanding contemporary uses of the term. The use of the term *trauma* for forms of violence associated with industrialization represented not only a social concern about the stresses and strains of modernity but also the beginnings of a shift toward a psychological notion of trauma. At the level of physical injury, while there was some debate about whether the sheer force of certain accidents could result in a new type of nervous shock, what was most obviously different was the person's experience of the nature of the accident.

Although trauma – in the sense of terrifying and violent events, fear, injury, and their aftermath – has been with us through human history and prehistory, current views of the ubiquity of trauma have been substantially shaped by three sets of events: (1) the wars of the twentieth century and the clinical and moral challenges they have raised, (2) the inclusion of PTSD in official psychiatric nosology, and (3) the increasing public and professional recognition of the prevalence and long-term effects of childhood abuse.

The social meaning of war has strongly influenced thinking about the nature of trauma and its impact (Shephard, 2001). Trauma has occurred in its greatest quantity and urgency in the context of wars and genocides.

Hence, the history of trauma is closely associated with the efforts to provide medical services to soldiers and civilians suffering in ever greater numbers as the technology and scale of war have expanded. With each war, new weapons have brought new types of injury and new things to fear. Each war has also left in its wake a cohort of veterans, who have struggled to rebuild lives shattered by injury and loss. However, some of the symptoms reported and viewed as central to war-related trauma have changed over time (Young, 1995, 2002).

In the American Civil War, the nervousness of veterans was conceived of as a physical disability termed "irritable heart" or "DaCosta's syndrome" (Hyams, Wignall, & Roswell, 1996). World War I brought the psychologized notion of "shell shock," which overlapped with previously identified syndromes of neurasthenia and hysteria. The favored construct in World War II was combat neurosis and treatments included hypnosis and emotional abreaction. The Vietnam War led to the introduction of the diagnosis of PTSD, which linked even greatly delayed symptoms to the horrors of war. The Gulf War brought a return to medical conceptions of the bodily effects of war in "Gulf War Syndrome," a collection of medically unexplained somatic symptoms that many psychiatrists believe are due to psychological stress or traumatic experiences, while some continue to search for toxic or infectious causes (Brown et al., 2001; Zavestoski et al., 2004).

Each genocide of the last one hundred years, from the slaughter of Armenians by Turkish forces, to the death camps of Nazi Germany, the killing fields of Pol Pot, and the massacres in Rwanda – the list is hellishly unending – has forced attention to the problem of massive social trauma (Hinton, 2002; Power, 2002). The initial impulse to turn away from distant horrors or to watch them through the controlled and controlling lens of mass media blunts our moral engagement (Dean, 2004; Kaplan, 2005; Sebald, 2003; Sontag, 2003). But clinicians, anthropologists, and those dedicated to advancing human rights and responding to the plight of refugees and displaced peoples insist we address both the immediate and enduring transgenerational impacts of massive trauma on individuals, communities, and whole nations (Agger & Jensen, 1996; Danieli, Rodley, Weisæth, & United Nations, 1996).

The psychiatric construct of PTSD must be understood in relation to the historical, political, and cultural contexts in which it emerged (Young, 1995, 1999). As originally introduced in *DSM–III*, PTSD was portrayed as a normal response to extreme circumstances (APA, 1980). The diagnosis served to link the suffering of Vietnam veterans to the terrible violence they witnessed and participated in.[1] By implying that the response was a direct effect of exposure to horrific violence, the diagnosis of PTSD served

[1] In fact, a substantial proportion of the patients with PTSD treated in the VA system and enrolled in research studies actually had no combat exposure (Frueh et al., 2005). This has

to simplify the complex causality and moral meaning of suffering and assign responsibility and blame. The diagnosis of PTSD supported veterans' claims for services and compensation for their war-related disabilities.

Over time, however, it has become evident that only some individuals exposed to extreme events develop symptoms of PTSD and that a variety of personal and social factors predict a poor outcome (Brewin, Andrews, & Valentine, 2000; Shalev, this volume; Yehuda & McFarlane, 1995). Hence, individual and collective vulnerability and resilience have emerged as crucial dimensions in any understanding of the impact of trauma. Clarifying these processes requires longitudinal studies in which a cohort of people is followed before and after exposure to traumatic events.

Trauma theory has moved on from the surgical metaphors of injury and healing to more precise, domain-specific models based on psychological and physiological processes. In popular discourse, however, although psychological notions of trauma have displaced its earlier physical meaning, the metaphor of physical trauma continues to hold sway: In contrast to the body's flexible adaptation to mild stress, severe stressors are thought to rupture, break, or shatter both body and mind.

What distinguishes PTSD from other psychiatric disorders is the attribution of causality and the role that memory plays in its symptomatology – as Allan Young (1995) has observed, memory is the linchpin that holds together trauma and disorder in the construct of PTSD. The dynamics of memory and of attributional processes are crucial for the diagnosis of PTSD because the criteria require that the person remember and attribute his or her symptoms to the traumatic event. Unfortunately, the fallibility of memory sometimes leads to ambiguity about what is veridical recall and what is reconstruction, embroidery, confabulation, or outright fabrication.[2] Add to this the high stakes of forensic settings where opponents try to determine culpability for past wrongs, and there are fertile grounds for conflict. What is at stake is not only psychological health but also moral legitimacy, legal credibility, economic benefits, and political power.[3]

In addition to symptoms related to fear and anxiety, the psychological consequences of trauma may include disturbances of memory, identity, and perception termed *dissociation* (Kihlstrom, 2005; Kirmayer, 1996).[4] The claim that individuals can forget, repress, or dissociate experiences

implications for understanding the nature of their distress and for the validity of conclusions drawn from the large amount of research based on this population.

[2] The classic study on the mutability of memory is Bartlett (1932). See also Schacter (1995).

[3] See Laney and Loftus (2005), McNally (1993), and Crews (1995). On the use of "false memory syndrome" to undermine the credibility of women in the courtroom, see Raitt and Zeedyk (2003).

[4] In fact, many types of dissociative experience occur commonly in the absence of trauma and are viewed positively, for example in religious ritual, healing practices, or creative fantasy (Kirmayer, 1994).

of trauma, only to have them cause distress later in time or reemerge in the form of symptoms, fantasies, or recovered memories caused enormous controversy in the 1980s and 90s as claims of "recovered memories" found their way into the courtroom (Appelbaum, Uyehara, & Elin, 1997).

Contrary to popular images and folk psychology, memory does not operate like a camera or videorecorder; that is, it does not record a continuous, accurate photographic copy of events or experiences (Schacter, 1995, 2003). Instead, we have a variety of learning and memory systems that extract details, meanings, and associations from the stream of experience according to specific needs, the ongoing deployment of attention, and cognitive and perceptual salience or relevance. Further, memories are changeable over time; that is to say, they are not fixed or perfect copies of experience but undergo repeated revision and transformation with each attempt at recollection. These basic facts about memory undermine claims about reexperiencing, flashbacks, and the like being the replaying of indelible records, suggesting that more complex processes of reconstruction must be going on (Laney & Loftus, 2005). Reflecting the cultural shaping of memory practices, reports of flashbacks have become more frequent in recent cohorts of British soldiers compared to those in earlier conflicts, who mainly suffered from somatic symptoms (Jones et al., 2003). Much of what gets labeled a flashback may reflect obsessional worry or vivid imagination rather than veridical recall (Frankel, 1994; Lipinski & Pope, 1994). Indeed, in many cases, apparent flashbacks are closer to imagined "worst case scenarios" about which the individual ruminates (Merckelbach, Muris, Horselenberg, & Rassin, 1998). However, it is certainly possible that trauma memories have unique characteristics that reflect the intensity of emotional arousal during their encoding and later retrieval (Brewin, 2005).

The notion that trauma involves a specific form of "body memory" remains contentious (Brewin, 2003; van der Kolk, 1994; van der Kolk, McFarlane, & Weisæth, 1996). Some accounts of body memory conflate two different types of learning: classical conditioning and verbal declarative memory. Declarative memory subserves our ability to describe past experiences and events – this is what is usually meant by memory in colloquial terms. Declarative memory may take episodic and semantic forms, which involve memory for specific scenes and events and memory of the meaning or significance of an event, respectively. Both forms of declarative memory involve reconstruction and usually interact in the process of recollection.

The body (more specifically, circuits involving subcortical and cortical areas of the brain not accessible to consciousness) acquires associations as conditioned emotional responses or habits (e.g., Pavlovian or classical conditioning as described in detail in Section I of this volume), but this does not yield declarative memory, and the origins of the learned association

cannot be directly described unless the event was encoded in parallel as declarative memory in the first place. Body memories (conditioned learning and the like) cannot be directly converted into declarative memories. Indeed, in a way they are not memories at all in the colloquial sense of the term but rather learned dispositions to respond in particular ways.[5] Such patterns of conditioned response must be represented and interpreted to construct a declarative memory. Self-reflection or conversation with others may lead us to interpret our current experience in terms of past events and construct an account of how our patterns of response embody and express specific elements of our personal history. Hence, if a declarative memory of a trauma did not exist in the first place, what we end up with is a *post hoc* interpretation or attribution of experience, which – if we forget the way we constructed it – may form a pseudo-memory akin to many apparent childhood memories that are actually reconstructions based on incorporating family stories or photographs into one's own recollections.

The vividness and intensity of bodily experiences in response to conditioned cues is sometimes offered as evidence for the reality and durability of body memories. However, these reactions remain open to many possible attributions or interpretations. We do use the vividness of memories and images to judge whether they are fantasies or real memories, but this is an unreliable guide because vividness depends on imaginative processes and can be easily influenced by suggestions.[6] Further, emotional or psychophysiological reactivity does not confirm the veridicality of memories. McNally and his colleagues found that people who believed they were abducted by aliens showed greater physiological reactivity when recollecting their "memory" than did Vietnam veterans recalling their traumatic combat exposure (McNally & Clancy, 2005; McNally et al., 2004).

The reconstructions of memory always occur in social contexts that warrant certain types of story as more or less credible. The philosopher Ian Hacking has described how increasing recognition of the problem of domestic violence and child sexual abuse provided a setting in which the prevalence of posttraumatic symptoms, particularly dissociative disorders, came to be widely recognized (Hacking, 1991, 1995). This increased recognition was met with skepticism by some and eventually resulted in heated controversy, as dissociative disorders like multiple personality disorder,

[5] Indeed, most learning is of this type; that is to say, changes in dispositions to respond in specific contexts constitute our knowledge and skills. For example, we cannot describe the learning and memory that underlie our motor skills or linguistic ability. Most such learning involves what cognitive scientists have called *procedural knowledge*, ways of doing things given the right context and tools at hand. Perhaps declarative memory can also be understood in terms of the procedural learning required to produce a specific descriptive narrative given the requisite cultural and linguistic resources at hand.

[6] See Johnson and Kaye (2000). Ironically, some real memories may lack vividness and this may contribute to the tendency to disbelieve the events.

which were thought to be exceedingly rare, were reported with increasing frequency. Much of this "epidemic" was iatrogenic – due to the influence of clinicians determined to unearth repressed or dissociated memories of childhood abuse (Acocella, 1999). By their very nature, dissociative symptoms are culturally shaped and highly malleable (Kirmayer, 1994). But any attempt to challenge the traumatic origins of dissociative symptoms was viewed as tantamount to a denial of the abuse that had occurred. And such denial in the face of suffering may be experienced as a new betrayal, which constitutes its own trauma (Freyd, 1996).

In recent years, recognition has increased for the ways in which trauma can exert effects across the generations from parent to child to grandchild. This can occur both within families and in whole communities affected by collective trauma. Some have argued for the idea that PTSD itself can be transmitted across generations through secondary traumatization; however, most of these transmitted effects do not resemble PTSD, although some effects, like increased anxiety, might predispose individuals to develop PTSD when exposed to a traumatic event (Danieli, 1998; Newcomb & Locke, 2001; Sigal & Weinfeld, 1989).

Transgenerational transmission of the effects of trauma may include many processes at the level of parent–child interaction within the family: (1) The child may be frightened by the parent's story, a form of secondary traumatization through symbolic presentation of the original trauma, which may be narrated, nonverbally enacted, or obliquely referenced, evoked, and imagined by the child with an intensity that engenders anxiety symptoms. (2) The child may be frightened, worried, or depressed by the parent's symptomatic behavior, which in turn may or may not be attributed to the original parental experience of trauma. (3) The child may be rendered more anxious and vulnerable to trauma as a result of parental anxiety, impaired parenting (parental preoccupation, neglect, overinvolvement, overprotectiveness), abuse, or other patterns of child rearing. (4) Or people may simply learn to attribute their own symptoms of anxiety, depression, interpersonal difficulties, and other non–trauma-related psychiatric disorders to their parents' history of traumatic experiences.

The transgenerational effects of trauma visited on whole communities are still more complex, because massive trauma on a collective level disrupts the fabric of communal life, challenging core social institutions and cultural values. This points to the need to understand how interactions between individual and collective processes contribute to resilience and reconstruction in the aftermath of political violence (Alexander, 2004; Robben & Suárez-Orozco, 2000).

In the case of indigenous peoples, for example, transgenerational transmission at both individual and collective levels may link current social and mental health problems to the effects of colonization and policies of forced assimilation, in what has been called *historical trauma*