

TRAUMA AND RECOVERY

The following paper examines the phenomenon of trauma. It begins with a definition, moves into describing how and under what conditions trauma occurs, how trauma impacts people who experience it and finally how it can be healed. This analysis is grounded in a rich body of academic literature, fifteen years of academic study and 30 years of fieldwork involving individuals, organizations and communities affected by trauma.

I. Trauma - A Brief Overview

Trauma is a condition that affects the physiology of the whole person. It impacts neural and biological pathways, emotions, and the cognitive, imaginative and psychological capacities of an affected individual. Trauma is a systemic event that impacts an array of regions within the body and mind.¹ Trauma is the result of one, or a series of experiences that the individual perceives as life threatening. It occurs when "both internal and external resources are inadequate to cope with external threat" ² The more an individual has been exposed to violence, severe conflict and deprived social conditions, the greater the likelihood and severity of the trauma.³

For many years, the fields of psychology and psychiatry have classified trauma as a simple psychological issue. Overwhelming evidence produced in the last 30 years has broadened and complicated this classification. Bessel A. van der Kolk, former Dean of the School of Psychiatry at Harvard Medical School, and leading researcher in the field, recently announced to his colleagues at a conference in Massachusetts that if they were not focused on the biological and neurological impacts of trauma, they would be unsuccessful in their treatment strategies. ⁴ Or, we could say as Peter Levine writes in, Waking the Tiger, Healing Trauma, that "the key to healing traumatic symptoms in humans is our physiology."

The key is that we understand that when faced with what is perceived as an overwhelming threat, we respond **involuntarily** which, " simply means that the physiological mechanism governing this response resides in the primitive, instinctual parts of our brains and nervous systems, and is not under our conscious control."⁵ What this demonstrates is that our psychological response is not primary, and is interwoven within a myriad of physiological factors that must be addressed.

Traditional knowledge considers trauma as a straightforward psychological issue, and therefore as an issue that affects the emotional self of an affected individual. If this is the working assumption, strategies implemented to deal with trauma will use traditional models of talk therapy. Trauma research indicates that such modalities alone will not work with more extreme conditions created by traumatic events. In order to work with these conditions, account must be taken of a multitude of intersecting biological and neurological factors.⁶

II. Neurological and Biological Impact of Trauma

The human body is wired to respond to external threats in three essential ways: to fight, to flee or to freeze. These responses are instinctual, and are initiated in the brain stem, or the amygdala. The brain stem is the smoke signal and circuit breaker of the brain. When a threat is perceived, it goes directly to this part of the brain for response. The human brain is wired then to respond to perceived threat without thought or consideration; it is wired to simply react. The entire nervous system organizes around the threat, and responds.

If the threat is particularly severe, repeated, or continuous, this instinctual response begins to calcify or harden. As a result of this process, energy pathways that when healthy are used as information highways to carry information to multiple parts of the brain and nervous system become unused and thus weaken. Over time, as essential brain and nervous system information pathways weaken, traumatized individuals begin to perceive a multiplicity of seemingly benign events in the world as life threatening. Thought patterns become deeply affected to the point where almost everything can be perceived as a potential threat⁷. Resultantly, to those suffering from trauma, the parts of the brain responsible for memory, critical thinking, consideration of the future and recognition of consequences for actions become more and more inaccessible.⁸

The process can be broken down in the following way: As the body organizes or mobilizes around a trauma response pattern, the normal sending of information between the nervous system, the brain, the emotions, and the cognitive processing centers in the neocortex becomes disrupted. This disruption can then create a myriad of unhealthy responses in the body and mind. At this point the mind/body/emotional system begins to function in a state of incongruity with the world. It begins to live in the word in a constant state of traumatization regardless of present experience.

A person diagnosed as traumatized, in the present moment, is no longer experiencing their trauma. Rather, their whole system has organized in such a way, as a result of the traumatic event or events, that ordinary, non-threatening experiences are interpreted, systemically, as threats,⁹ They are perceived as threats, felt as threats, and responded to as threats even when, to the outside observer, they seem benign. Thus, a traumatized individual, responding incongruently in this way, will perceive and feel fear when there is no objective need to be afraid.¹⁰

When the system is acting incongruently, a series of predictable changes in the individual occur. Trauma produces a powerful state of hyper-arousal in the body. Neural-pathways become locked in, and the

-3-

body looses many of its important cognitive and emotional resources. Thus, "normal" functioning becomes impossible. The body's fight or flight process becomes a trait in the individual. In other words, these states, like the neuro-physio (mind and body) pathways they impact, calcify and harden into traits that take on the gravity of permanence.^{11,12}

In order to combat this state of hyper-arousal, the amygdala (reptillian or instinctual part of the brain) acts as the body's circuit breaker and literally flips the switch, shutting down the state of hyper-arousal. The resulting condition is called disassociation. The affected individual disassociates from present reality. The more chronic the trauma, the more chronic the disassociation, and in turn this state becomes a trait.

In conclusion, we can see how research demonstrates that response to trauma is not a psychological phenomenon; it is a chemical cascade reaction that affects psychology and behavior. When working with individuals and communities with trauma this understanding is our foundation, and it needs to guide our response strategies.

III. Recovering From Trauma

Individuals cannot "think their way" through trauma, nor can they simply talk about their experiences and "get better". Trauma is not a thinking process. Fight, flight, freeze and disassociation responses occur seven synapses before information even reaches the neocortex,¹³ or thinking parts of the brain. In the latest CAT-scan research, when trauma victims were triggered, the entire neocortex region of the brain went dark while the amygdala lit up. This research clearly illustrates the chronic and neuro physiological aspects of trauma and helps us to understand what appropriate healing strategies are going to look like. **First of all, the strategy must deal with the body.** It must assist the individual to process the information that is sent throughout the system in a conscious and aware manner. This moving though the trauma involves mobilizing the energy generated by the trauma response into patterns that do not follow the traumatic cascade of hyper-arousal and disassociation.

Strategies must train traumatized individuals to recognize when they are becoming symptomatic and to use a variety of tools to modify their responses. Over time, the pathways that have been neglected due to the traumatic state can be put back to use. Information can then be sent to the neocortex and other regions of the brain, and behavioral, thoughtful, emotional and creative capacities once lost can be restored.

Movement of the body is essential to movement of energy and information. Human beings, unlike other animals, do not naturally process and work through the massive energy charge created by traumatic events. Instead, each trauma leaves a mark on the nervous system of the individual, which in the absence of good training, will slowly impact a number of known and unknown aspects of conscious and unconscious activity. ¹⁴

Training the body is of the utmost importance when working to rebuild heavily traumatized individuals and communities. Long after the events that triggered the traumatization have passed, the affected individuals will still be living in a traumatized state.¹⁵

In this state, it is ordinary for seemingly reasonable events and experiences to be interpreted as threats, for cognitive and behavioral capacities to be severely limited and memories to be disjointed. The potential for building a base of new, non-violent and non-threatening experiences and

- 5 -

opportunities under these conditions is severely compromised. This means that even if a healthy and just infrastructure for the individual or the community is built, the trauma will live on.

Individuals experiencing trauma live life in a chronic state of fight, flight or freeze, and suffer constantly from hyper-arousal of the nervous system. Many common coping strategies for this condition of life are unhealthy for the individual and for the community. Drug use may be the most common strategy as drugs soothe this hyper-arousal condition, and beyond the obvious physical, mental and emotional side affects, drug use intensifies states of disassociation that inhibits contact with the present.^T It is also common for the traumatized individual to become highly volatile and/or extremely violent. Or, at the extreme end of the spectrum, they may feel like life is impossible to deal with and choose suicide. To such wounded individuals, the world can become a dark place full of innumerable threats long after the initial threat has passed.

Across the board, researchers in the fields of biology, neurology, psychology, and psychiatry have found that leading edge recovery strategies necessarily equip trauma survivors with a wide array of creative tools and experience that:

a.) Help them to access buried emotional states and memories.

b.) Help them to disclose feelings and difficult experiences related to the trauma.

c.) Facilitate conditions for the healthy re-enactment and moving through of painful memories.

d.) Provide training in self-awareness, hot meditation and visualization tomove the energy of trauma through the body, and reengage deactivated neural processes.

e.) Arouse and consciously utilize physiological resources essential to integrating the traumatic material.

While these tools and experiences have been seen as "extras" in the rush to heal individuals, families, societies and communities, today these tools and experiences are essential to sustainable and meaningful recovery programming.

IV. Conclusion

At the deepest levels, trauma severely limits human creativity, imagination and cognitive capacities. The more chronic the exposure, the more severe the damage absorbed by body and mind. This fact poses great challenges to affected populations as well as outside helpers. The key is to maintain a heightened and vigilant attention of openness and awareness. The goal is to keep the pathways of creativity and imagination open as traumatic events threaten to shut them down, and to use this creativity and imagination to create programming and development strategies grounded in an understanding of trauma and traumatization.

When we are unable to flow through trauma and complete instinctive responses, these incomplete actions often undermine our lives. Unresolved trauma can keep us excessively cautious and inhibited, or lead us around in ever-tightening circles of dangerous reenactment, victimization, and unwise exposure to danger. We become the perpetual victims or therapy clients. Trauma can destroy the quality of our relationships and distort sexual experiences. Compulsive, perverse, promiscuous, and inhibited sexual behaviors are common symptoms of trauma – not just sexual trauma. The effects of trauma can be pervasive and global or they can be subtle and elusive. When we do not resolve our traumas, we feel that we have failed, or that we have been betrayed by those we chose to help us. We need not blame this failure and betrayal on ourselves or others. The solution to the problem lies in increasing our knowledge about how to heal trauma. Peter Levine, Waking the Tiger, Healing Trauma, p.32

-7-

FOOTNOTES + CITATIONS

¹ van der Kolk BA; The compulsion to repeat the trauma: Re-enactment, revictimization, and masochism. : Psychiatry. 1985 Nov;48(4):365-70. van der Kolk BA, Herron N, Hostetler A. The history of trauma in psychiatry. 1986

See also Peter A. Levine with Ann Fredericks, Waking the Tiger - Healing Trauma. North Atlantic Books, Berkeley California. 1997 and Judith Herman, M.D., Trauma and Recovery, The aftermath of violence - from domestic abuse to political terror. Basic Books, New York. 1997 for two excellent sources examining the full scope of trauma's effects on individuals and communities as well as for healing pathways.

² The compulsion to repeat the trauma. Re-enactment, revictimization, and masochism. van der Kolk BA. : Psychiatry. 1985 Nov;48(4):365-70.

³ Psychobiologic research in post-traumatic stress disorder. Southwick SM, Bremner D, Krystal JH, Charney DS. Encephale. 2000 Nov-Dec;26(6):55-61

⁴ Biology of posttraumatic stress disorder. Yehuda, R. Biol Psychiatry. 1998 Dec 15;44(12):1305-13.

The compulsion to repeat the trauma. Re-enactment, revictimization, and masochism. van der Kolk BA. : Psychiatry. 1985 Nov;48(4):365-70. Selectively reduced regional cortical volumes in post-traumatic stress disorder. Rauch SL, Shin LM, Segal E, Pitman RK, Carson MA, McMullin K, Whalen PJ, Makris N. Semin Clin Neuropsychiatry. 2001 Apr;6(2):131-45.

⁵ Idem., Levine, Peter pg. 17

⁶ Brain imaging in posttraumatic stress disorder.Villarreal G, King CY. Curr

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⁷ (This is the conditioned loosely referred to as Post Traumatic Stress Disorder (PTSD). This designation, however, is no longer considered the only way to describe trauma. As one reads the vast array of literature on the subject of trauma one finds PTSD and trauma used interchangeably at times, sometimes for emphasis or to describe a varying degree of intensity of traumatization. Please see chapter two of aforementioned ., Trauma and Recovery, The aftermath of violence – from domestic abuse to political terror. For clarity, I will stick to simply using the terms trauma and traumatiztion.

⁸ The body keeps the score: memory and the evolving psychobiology of posttraumatic stress. van der Kolk BA. : Am J Psychiatry. 1996 Jul;153(7 Suppl):83-93.

⁹ Dissociation and the fragmentary nature of traumatic memories: overview and exploratory study. van der Kolk BA, Fisler R. 1: Psychiatr Clin North Am. 1994 Sep;17(3):583-600.

¹⁰ Peter Levine, from Waking the Tiger, Healing Trauma, offers the following example of this phenomenom in its extreme, yet not uncommon form, "Many traumatized people feel that they live in a personal hell in which no other human could possibly share. While this is not entirely true, elements of this perception are accurate. Here is a condensation of what severely traumatized individuals struggle with: I don't know one thing I don't fear. I fear getting out of bed in the morning. I fear walking out of my house. I have great fears about death... not that I will die someday, but that I am going to die within the next few minutes. I fear anger... my own and everyone else's, even when anger is not present. I fear rejection and/or abandonment. I fear success and failure. I get pain in my chest, and tingling and numbness in my arms every day... I just really hurt most of the time. I feel that I can't go on. I have headaches. I feel nervous all the time. I have shortness of breath, racing heart, disorientation, and panic... I have no energy or motivation, and when I do accomplish something I feel no sense of satisfaction. I feel overwhelmed, confused, lost, helpless, and hopeless daily. I have uncontrollable outbursts of rage and depression. Pp. 47-48

¹¹ Developmental neurobiology of childhood stress and trauma.
 Teicher MH, Andersen SL, Polcari A, Anderson CM, Navalta CP. Encephale.
 2002 May-Jun;28(3 Pt 1):241-7

¹² The psychobiology of posttraumatic stress disorder. van der Kolk BA. Harv Rev Psychiatry. 1994 Jan-Feb;1(5):253-65 For example, if one twists one's right ankle on numerous occasions, this state of weakness and vulnerability at that point in the body will eventually become a trait that becomes quite difficult to overcome. The injury will become calcified through the tissues, ligaments and muscles of the ankle. Over time, precisely as with trauma, the whole body – the back, the neck, and the other leg – will begin to compensate for, and organize around this disturbance. As a result, one begins to perceive simple and ordinary movements like walking down steps as potential threats.

¹³ *The psychobiology of posttraumatic stress disorder. Nutt DJ. Psychiatr Clin North Am. 1994 Jun;17(2):251-64
Biological factors of post-traumatic stress: neuroendocrine aspects [Article in French] Birmes P, Escande M, Gourdy P, Schmitt L. Depress Anxiety. 2002;16(1):14-38.

¹⁴ Developmental neurobiology of childhood stress and trauma. Teicher

MH, Andersen SL, Polcari A, Anderson CM, Navalta CP. Encephale. 2002 May-Jun;28(3 Pt 1):241-7.

¹⁵ Prediction of the occurrence and intensity of post-traumatic stress
disorder in victims 32 months after bomb attack. Jehel L, Paterniti S, Brunet
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¹⁶ Substance use disorders in patients with posttraumatic stress disorder:
a review of the literature. Jacobsen LK, Southwick SM, Kosten TR.
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