

# Casualties

Jonathan Shay

*Abstract: Privation and disease have mainly killed soldiers until very recently. Now that enemy action predominates, faster and better control of bleeding and infection before and during evacuation spares ever more lives today. This essay focuses on psychological war wounds, placing them in the context of military casualties. The surgeon's concepts of "primary" wounds in war, and of wound "complications" and "contamination," serve as models for psychological and moral injury in war. "Psychological injury" is explained and preferred to "Post-Traumatic Stress Disorder," being less stigmatizing and more faithful to the phenomenon. Primary psychological injury equates to the direct damage done by a bullet; the complications – for example, alcohol abuse – equate to hemorrhage and infection. Two current senses of "moral injury" equate to wound contamination. As with physical wounds, it is the complications and contamination of mental wounds that most often kill service members or veterans, or blight their lives.*

The veterans I served for twenty years were rigorous, generous, and patient teachers on what had wrecked their lives and what might be done to protect the new generation of American kids who go into harm's way for our sakes.<sup>1</sup> They made me their missionary to the U.S. forces on prevention of psychological and moral injury. So, practicing full disclosure, this essay has the veterans' missionary agenda as its energy source, and speaks with my personal voice, not detached, god-speak from the edge of the universe.

Some history puts current *physical* casualties in context. In 1861, the French civil engineer Charles Minard published a brilliant, if misleading, graphic of losses from Napoleon's army during its hellish round trip from the Polish border to Moscow and back, 1812 to 1813. Most non-historians today know of this chart through Edward R. Tufte's classic, *The Visual Display of Quantitative Information*. The subzero cold prevailing during the retreat from Moscow rivets attention, both because of the black, dramatically thick, but rapidly thinning line drawn westward across a map of Russia to graphically represent troop strength during the winter retreat, and

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*Casualties* the prominent temperature scale linked to this ever-dwindling line. However, in his “Combat Trauma Overview” for the *Anesthesia and Perioperative Care* volume of the *Textbook of Military Medicine*, Colonel Ronald F. Bellamy, a retired U.S. Army Medical Corps surgeon,<sup>2</sup> points out that Napoleon lost two-thirds of his 400,000-plus army, primarily to *heat*, disease, and starvation before reaching Borodino, not far from Moscow. You can see this staggering attrition during the approach march in Minard’s graphic, if you look for it past the eye-catching, “it was not Bonaparte’s fault” visual narrative.

But one needn’t go so far back as Napoleonic warfare to see what a hostile physical environment can do to an army: during World War II in North Africa, far-famed Rommel had twice as many troops in hospital for sickness as killed, wounded, or missing.

It is hard for us in the twenty-first century to recall that the main killers of troops throughout history have been the privations of the nonhuman physical environment: heat, cold, dehydration, hunger, and above all, disease. The fact that Homer’s *Iliad* opens with a plague – “and the funeral pyres burned day and night” – is entirely realistic, not merely the poet’s evocation of the gods’ heavy hands. Americans are brilliant and culturally lavish at logistics, provisioning our troops with *everything material* they need to stay functional and whisking them away from danger when they are hurt or sick. Today’s ever more abundant supply of safe drinking water and food to U.S. troops deployed in the harsh environments of Iraq and Afghanistan probably improves their fate over Rommel’s troops in North Africa far more than antibiotics and air evacuation when the enemy has inflicted wounds. Still, as of early 2008, the number of service members evacuated from the current theaters

of war by air for “diseases/other medical” roughly equaled the number evacuated for physical injuries. War zones *remain* dangerous, unhealthy places.<sup>3</sup>

But the enemy *does* matter, and in past centuries many, many more eventually died from wounds than died immediately on the battlefield. Homer’s portrayal of virtually every wound as instantly fatal is one of the very few glaring untruths about war in the *Iliad*. The true medical “miracle” of today’s military medicine is how few of the wounded die, if they can be brought alive out of the fight. This miracle continues to evolve, with developments in the ability to call for help; speed of evacuation to comprehensive treatment; prevention of exsanguination, wound contamination, and hypothermia; and concentration on the tedious basics of “damage control” surgery and resuscitation, even while airborne en route to a fully equipped and staffed surgical hospital. To this specialized military medical progress one must above all add recent progress in training *all* troops to be life-savers, providing them with means to stop bleeding; training, equipping, and empowering the lowest echelon medics/corpsmen to make critical next steps before the wounded service member’s physiology has completely collapsed. As brilliant as American forces are at the logistics of supplying what soldiers need to stay fit in harsh environments, and moving the wounded quickly to surgical treatment and physiological support, there may be no “golden hour” on the battlefield, maybe only a golden five minutes during which self- and buddy-care make all the difference.

Even laymen know that when a high-velocity bullet or shell fragment takes off a soldier’s or marine’s arm, severing arteries, it is not the primary wound that kills, but the *complication* of hemorrhagic

shock. If the bleeding is controlled, but nothing further is done, the *complication* of wound infection in this contaminated wound, loaded with foreign bodies and devitalized tissue, will bring death a few days or weeks later. Napoleon's troops knew enough to stop bleeding if they could, as did Agamemnon's troops. Achilles was revered by the troops for his *surgical* knowledge, in addition to his fighting prowess. But Homeric or Napoleonic, the wounded were largely doomed by infection.

I draw this distinction between complications and primary injury to segue from physical wounds of war to the psychological wounds of war, where complications and "wound contamination" take greater tolls than the primary injury.

For years I have agitated against the diagnostic jargon, Post-Traumatic Stress Disorder (PTSD), because transparently we are dealing with an injury, not an illness, malady, disease, sickness, or disorder. My insistence comes from awareness that within military forces it is entirely honorable to be injured, and that if one is injured and recovers well enough to be fit for duty, there is no real limit to one's accomplishments, even if a prosthesis is employed. Witness the honored career of General Eric Shinseki, who lost a foot in Vietnam, and eventually retired from the U.S. Army as chief of staff. We do not describe him as suffering "Missing Foot Disorder."

To fall ill in the service of one's country is not *dishonorable*, but it sure is *unlucky*. Nobody wants to share a fighting hole or vehicle with an unlucky soldier or marine, a ship's watch with an unlucky sailor, or aircraft with an unlucky airman. It is stigmatizing in that culture. Among other reasons as well, my agitation has been against the gratuitous stigma conferred in the diagnostic name by its location in the semantic range of disease – Post-

Traumatic Stress Disorder – rather than of Jonathan Shay

Wound.

What is the primary psychological wound of war? Here I mean *primary* not as "most important," but rather, in the sense of "no complications." Recall how the primary traumatic amputation did not kill the service member, but the complications of hemorrhage and infection did.

In this sense, the primary psychological injury from war is the persistence into civilian life (or life in garrison) of the valid physiological, psychological, and social adaptations that promoted survival in the face of other human beings trying to kill you. Measured against the descriptive criteria for a diagnosis of PTSD, the fit is pretty good: the mobilization of the mind and body for lethal danger, the shutting down of activities, thoughts, and emotions that do not directly support survival in the fight, the intrusive hyper-remembering of what the danger looks, smells, or sounds like, to never be taken unprepared.

For example, a primary psychological injury from the current theater in Iraq: A valid survival strategy against roadside improvised explosive devices (IEDs), while driving a vehicle in Iraq, is to drive down the center of the road as fast as possible. This is a rational survival strategy: a fast-moving vehicle is harder to hit with a command-detonated explosion than a slow-moving vehicle; it is impossible for a driver to know on which side of the road the bomb might be; explosive force declines as the inverse square of the distance; the largest average maximum distance from both roadsides is the center of the road. Upon return to garrison at, say, Camp Lejeune or Fort Hood, a service member who, while driving (especially if sleep-deprived), momentarily loses the distinction between here-and-now and there-and-then may well die in a high-

*Casualties* speed head-on collision on the roads around Jacksonville or Kileen. The valid adaptation is, in a post-danger setting, no longer adaptive, and in this instance fatal, not only to the service member! Such examples abound, especially when the outcome is less dramatic, often resulting only in inconvenience, other people's puzzlement, or embarrassment.

In the absence of complications, primary psychological injuries from war usually do not wreck veterans' lives. Many adapt to the injury in much the same way as physically injured veterans adapt to injury: they learn skills and workarounds; they use prostheses. For example, I had a patient who was a Vietnam War Marine infantry veteran who had a non-negotiable aversion to showing up in the open in a crowd because it read as "bunching up": that is, making oneself a target for enemy snipers and mortarmen. He could not sit in the stands to watch his son's Little League games, even though he rationally knew there were no snipers. He was simply too uncomfortable to endure it. So his workaround was to watch the game from his truck parked far out the third baseline off left field. This same veteran worked for the gas company. His direct supervisor was also a veteran and made a "workplace accommodation" to my patient's disability: instead of requiring him to muster in the open truck yard at 7 a.m. with the other gas service-technicians to receive work orders, the supervisor would leave my patient's work orders in a box where he would pick them up at 5 a.m. when no one was around. He would then have breakfast and begin his day's work.

The most common and disastrous complications of primary psychological injury from war flow directly from persistence of combat sleep patterns. A soldier's vigilant sleep – a light doze, instantly ready to

respond to danger – is an obviously valid adaptation to an active war zone. If it is not safe to shut out sounds and shadowy movements, they are not shut out, but instead are acknowledged in the soldier's sleep. When this adaptation persists afterward and disrupts sleep, two extremely common complications supervene: first, use, then abuse of alcohol to promote sleep, and second, loss of emotional and ethical self-restraint and of social judgment. The disastrous pharmacology of alcohol as a sleep medicine is widely known. Less known is impairment of frontal lobe function by sleep loss, per se, which does terrible damage to the lives of veterans and their families. Sleep is fuel for the frontal lobes of the brain. When you are out of gas in your frontal lobes you become a moral moron and unable to control your behavior in the face of emotions such as anger. Alcohol problems and loss of authority over emotion can thus be seen as complications – akin to hemorrhage and infection – of the primary injury. As with physical wounds, the complications may be far more destructive than the primary injury, such as fatalities connected with alcohol and fatalities in fights connected with loss of authority over anger. Repetitive combat nightmares are prodigious destroyers of sleep. I view traumatic nightmares as an evolutionarily ancient form of remembering about lethal danger, a "primary injury." These nightmares themselves, avoidance of going to sleep because of them, and self-medicating with alcohol to suppress them are further examples of complications to a primary injury.

One category of psychological injury – moral injury – has recently lit up both in military professional circles and in the clinical literature. I adumbrated the concept in *Odysseus in America: Combat Trauma and the Trials of Homecoming*:

When I speak of prevention of moral injury in military service, this Homeric episode [Agamemnon's public dishonor of his most effective and revered subordinate, Achilles, in *Iliad* Book 1] is an example of what I want to prevent: betrayal of "what's right" in a high stakes situation by someone who holds power. The consequences for those still on active duty range from a loss of motivation and enjoyment, resulting in attrition from the service at the next available moment, to passive obstructionism, goldbricking, and petty theft, to outright desertion [for example, Achilles in the *Iliad*], sabotage, fragging [Achilles almost kills Agamemnon in Book 1], or treason. In a war, the consequences are catastrophic.<sup>4</sup>

I devote the final fifty pages of *Odysseus in America* to prevention of psychological and moral injury in military service. My current most precise (and narrow) definition has three parts: moral injury is present when (1) there has been a betrayal of what's right (2) by someone who holds legitimate authority (3) in a high-stakes situation. When all three are present, moral injury is present and the body codes it in much the same way it codes physical attack.

I emphasize the element of *leadership malpractice* because it is something we can *do* something about. The prevalence of leadership malpractice<sup>5</sup> is extremely sensitive to policy, practice, and culture in a military organization. My activities with military forces have been directed that way. They have given me a hearing and appear somewhat receptive,<sup>6</sup> largely because they recognize that ethical leadership is a combat strength multiplier. When a leader betrays "what's right," he or she demotivates vast swaths of troops and detaches whole units from loyalty to the chain of command. Stated positively, troops *do* want to know that what they are doing has a constructive purpose, that

their direct leaders know their stuff and know their people. Sacrifice falls most heavily on their people. Jonathan Shay

While I have had bully pulpits before receptive military groups, I cannot point to much change in policy and practice that would significantly reduce the prevalence of leadership malpractice. Some examples of changes not made: change "up-or-out" to "up-or-stay" (subject to rigorous performance evaluation), broaden the who and the how of performance evaluation (for example, "360-degree evaluation"), stop imagining officership as a form of "general management," where no specific functional expertise is required.<sup>7</sup>

When the term *moral injury* has surfaced in recent psychological research literature, it has been used somewhat differently: "Potentially morally injurious events, such as perpetrating, failing to prevent, or bearing witness to acts that transgress deeply held moral beliefs and expectations may be deleterious in the long-term, emotionally, psychologically, behaviorally, spiritually, and socially."<sup>8</sup> The cited clinicians/researchers have shown an elevated risk of domestic violence and suicide, if moral injury is present. Our two meanings of moral injury differ mainly in whether leadership malpractice is part of the definition. The view of the above researchers could be paraphrased as what happens (1) when someone "betrays what's right" and (2) the violator is the self (3) in a high-stakes situation. I have focused where the betrayer of what is right holds legitimate authority. Moral injury in my meaning can lead to moral injury in the above clinicians/researchers' meaning. An example would be for a soldier or marine to be ordered to murder civilians or disarmed, unresisting prisoners (likely a moral injury in my sense), and then, feeling compelled to carry it out, to incur moral injury in their

*Casualties* sense. Our junior enlisted fighters do *not* want to know themselves to be murderers.

Ethical philosophers such as Bernard Williams and Martha Nussbaum have addressed the situation that these clinicians/researchers and I report on, under the somewhat opaque term *moral luck*. Nussbaum has written with great force on the deteriorating impact of (bad) moral luck on good character and connection to others, particularly in her classic, *The Fragility of Goodness*: “Annihilation of [ethical] convention by another’s acts can destroy...stable character.”<sup>9</sup>

Unfortunately, war itself creates an abundance of “moral (bad) luck” that cannot be completely prevented short of ending the human practice of war—which many combat veterans in and out of uniform long for. A recent incident, told to me as having happened in Fallujah, involved a Marine scout-sniper who was supporting an engaged infantry unit, which had losses to a very effective, well-concealed enemy sniper. When the Marine sniper finally discovered and positively identified the enemy sniper, the marine could see that he had a baby strapped to his front in what we would call a Snuggli baby carrier. The marine interpreted this as use of the baby as a “human shield.” Regardless of whether that was true, the marine understood the Law of Land Warfare and the Rules of Engagement permitted him to fire on the enemy sniper, and he understood his duty and his loyalty to his fellow marines to do so. He did fire, and saw the round strike. He will live with that for the rest of his life.

One of my former patients, a well-educated Roman Catholic, opened with the words, “I led them into sin,” when he became willing to tell the clinical team the most tenaciously painful experience he had had in Vietnam. He and his three-man Marine fire team were left in charge

of seventeen disarmed and nonresisting Vietnamese prisoners. As the sergeant was leaving the scene he said over his shoulder, “We don’t need no prisoners,” which my patient understood to be an instruction to kill them. My patient discovered that the other marines were reluctant to murder the prisoners. My patient egged them on and was the first to open fire. He calmly carried the certainty that he personally was damned (his understanding of his religious tradition), but found it impossible to live with the knowledge that he had led the other marines into mortal sin.

What does leadership malpractice add to the elements visible in betrayal of what’s right by the self in a high-stakes situation? Primarily, it *destroys the capacity for social trust* in the mental and social worlds of the service member or veteran. I regard this as a kind of wound contamination in the mind, preventing healing and leaking toxins.

When the capacity for trust is destroyed, its place is filled by the active expectancy of harm, exploitation, or humiliation. We do not learn one iota more about the human being before us by hanging the psycho-jargon word *paranoid* on this expectancy.

There are three common strategies for dealing with a situation in which harm, exploitation, and humiliation are foreseen: strike first, get away to complete isolation from others, develop effective deception and concealment. All three of these strategies are formidable destroyers of a flourishing human life. They are also barriers to service members or veterans ever obtaining or keeping meaningful mental health care. In the modern medical setting, this means trusting a clinician on the basis of his or her *credentials* and *institutional position*. The credentials and institutional position of the original military perpetrator of moral injury were often impeccable, so

the situation of being asked to trust someone purely on that basis (“Hello, I’m Dr. Shay. I’m a Staff Psychiatrist here . . .”) is likely to be a traumatic trigger, a new danger. And if the strike first, run away, or deceive strategies are not enough of an obstacle to obtaining and keeping care, the clinician often takes offense at *not* being automatically trusted, and chases the veteran away or retaliates.

Many of the veterans I worked with had histories of having done great harms to others, some with heavy criminal careers since Vietnam, often carrying prior diagnoses such as “sociopath,” “borderline personality disorder,” or “character disorder.” The general consensus of American mental health has been that no bad experience in adulthood can turn someone with good character into someone with bad character. This is a broadly and deeply held philosophic position, which has a brilliant pedigree going back to Plato, through the Stoics, to Kant, and to Freud. Plato said that if you make it out of childhood with good breeding (we would say “good genes”) and good upbringing, then your good character, your virtuous behavior will form as hard, unbreakable, and immovable as rock. American psychiatry has consistently rejected attempts to diagnostically recognize deformities of personality or character arising from bad experience. The American Psychiatric Association (APA) has rejected two attempts to get such phenomena recognized in the nosology: “Persistent Personality Change after Catastrophic Experience” and “Disorders of Extreme Stress, Not Otherwise Categorized.” The former is part of the World Health Organization nosology; the latter, under the less opaque label “complex PTSD,” is very widely accepted by clinicians who work with morally injured populations, such as survivors of incest or political torture, despite its lack of official blessing. “Post-Traumatic Embitter-

ment Disorder,” a phenomenon defined and proposed as a diagnostic construct by Professor Michael Linden and his colleagues at the Charité in Berlin, has not (yet) been exposed to the Platonic filter of the APA.

The key to clinical success in working with such veterans and service members is their *peers*. This is a post-service parallel to the psycho-protective benefit *in* the service of *cohesion*. Cohesion is military-speak for the concrete face-to-face familiarity, mutual love, reliance, obligation, and visceral sense of being part of each other’s future that arise spontaneously in a stable, well-trained, and well-led unit that has been through hard things *together*. Credentialed mental health professionals, myself included, have no business taking center stage in the drama of recovery from moral injury. We can be good stagehands and bit players, but the real stars are other veterans who have walked in their shoes. Working with veterans carrying such injuries is a constant lesson in humility. We clinicians *earn* trust; we learn to go naked; we listen with the heart as well as the head.

Before finishing, a public policy item relating to moral injury deserves thoughtful debate. Morally injured veterans are vulnerable to recruitment by tight criminal, or coercive religious or political groups. This is not a “liberal anti-military” riff on a supposed association between military service and right-wing extremism. The historical record is clear: German World War I front veterans who were demobilized *together* and returned together to the town in which their division was raised, generally settled peacefully back into civilian society, even when their home towns were now on the *other* side of newly drawn national borders. They rarely gravitated to the *Freikorps*, extremist political gangs of *both* the Left and the Right that sometimes functioned as “death squads.”

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*Casualties* Instead, an “elective affinity” for such groups was discovered by veterans of special *Reichsheer* formations, such as the Jaegers and the Naval Infantry, which recruited individual volunteers from regular army units. Members of these elite units were demobilized *as individuals* and scattered to the winds.

Why raise this historical curiosity here? Because we have a sociologically analogous situation with repatriated “trigger-puller” contractors from the current theaters of war, who have neither home station to return to nor military unit association nor clear-cut VA eligibility for health care and disability pension benefits. The fact that many, or most, have prior military service will prove a most capricious entitlement to call upon. The essay by Deborah Avant and Renée de Nevers in this issue gives an up-to-date overall picture of military contractors in Iraq and Afghanistan, although the number carrying and using firearms remains very hard to come by.

Who will offer social support and mental health services to trigger-puller contractor veterans? I am not saying that I know that the Weimar Republic would still exist today, with all that implies about a different course to history, if Germany had had Vet Centers and VA Mental Health Clinics. But historians generally agree that the *Freikorps* contributed to the weakening of the new German political fabric in the immediate aftermath of World War I. Obviously, not all psychologically and morally injured trigger-puller military contractors will ask for help. But as a matter of public policy, it will be a *very* good investment to make them eligible to receive it, without a lot of hoops to jump through. This is not a handout to the contracting firms, who might be supposed to be obligated to provide medical benefits to injured former employees. Whether or not current law can be construed to com-

pel these firms to provide mental health coverage, I regard that as *very* imprudent for us as a nation to rely upon. The Vet Centers, even more than the VA, have the peer-tradition to offer meaningful support to this demographic group, although some VA facilities have developed significant peer support and community-of-experience based programming.

To conclude, I want to dispute the habitual mind-body distinction that I myself implicitly made early in this essay by distinguishing physical from psychological injuries. This distinction is often useful, but at its root, incoherent. “The body keeps the score,” as traumatologist Bessel van der Kolk has so resonantly said. The body codes moral injury as physical attack and reacts with the same massive mobilization. If you doubt that, try the following very unpleasant thought-experiment: Imagine, as vividly as you can, a situation that applies to *your* life circumstances that fits my definition of moral injury: a betrayal of what’s right, by someone with legitimate authority, in a situation with high stakes *to you*. I guarantee that your heart rate and guts will respond. We are just one critter: brain/body, mind, social actor, and culture inhabitant at every instant. None of these has ontological priority.



## ENDNOTES

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<sup>1</sup> In addition to my experience working as a psychiatrist for veterans, I have served in various capacities for the U.S. military, including Commandant of the Marine Corps Trust Study (1999–2000); Chair of Ethics, Leadership, and Personnel Policy in the Office of the U.S. Army Deputy Chief of Staff for Personnel (2004–2005); and 2009 Omar Bradley Chair of Strategic Leadership, U.S. Army War College (2010). I have also worked with Canadian Forces, U.K. Royal Marines, U.K. Royal Navy, Bundeswehr, other NATO, and Israel Defense Force personnel.

<sup>2</sup> The *Textbook of Military Medicine* is a vast multivolume, periodically updated work published by the Army Surgeon General. I commend the reader to the whole U.S. Army Medical Department Borden Institute website, <http://www.bordeninstitute.army.mil/>, where the following are available in their entirety as free downloads: all the massive current volumes of the *Textbook of Military Medicine*; various monographs, such as *Water Requirements and Soldier Hydration and War Surgery in Afghanistan and Iraq, A Series of Cases, 2003–2007*; and *Emergency War Surgery*, 3rd rev. ed. (2004).

<sup>3</sup> The data in this paragraph were current as of January 5, 2008. The number wounded in action (that is, by enemy action) in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) was 9,801. This number represents only those injured severely enough to require medical air transport out of theater, which I take as a proxy for the severity of injury. (The number is 2.3 times higher when taking into account those wounded by hostile action, but whose wounds could be treated within theater without evacuation. However, this latter proportion applies only to OIF; the “more austere” medical facilities of OEF have meant that the wounded there are, proportionally, evacuated more frequently.) Adding roughly an equal number of nonhostile injuries severe enough to require medical air transport brings the number of those injured in OIF and OEF, as of January 5, 2008, to a combined total of 19,522. Adding “diseases/other medical” requiring medical air transport roughly doubles the combined total, as of January 5, 2008, from OIF and OEF to 46,751 (that is, the total of all who have been medically air transported out of theater for medical/surgical reasons).

Lest the reader speculate that the number of “diseases/other medical” has been inflated by *mental health* evacuations, note two facts: First, current military medical doctrine calls for treating combat stress reactions as close as possible to the service member’s unit, using brief and simple interventions such as “Three Hots and a Cot”: that is, physiological replenishment of food and water (three hots) and sleep (the cot). The doctrine discourages evacuation from theater because evacuation is believed to freeze the psychological injury in place, at a time when it is still reversible. This view has some empirical foundation. Second, a January 30, 2005, report from MHAT II (OIF-11 Mental Health Advisory Team) estimated that all mental health diagnoses together accounted for 6 percent of evacuations, and of these 11.7 percent were Post-Traumatic Stress Disorder (PTSD) and Acute Stress Disorder (ASD), narrowly and strictly diagnosed.  $46,751 \times 0.06 \times 0.117 = 499$ . A narrow definition of PTSD used by the Department of Defense Task Force on Mental Health produced an estimate that 10 percent of those deployed in OIF and OEF had PTSD; see Department of Defense Task Force on Mental Health, *An Achievable Vision: Report of the Department of Defense Task Force on Mental Health* (Falls Church, Va.: Defense Health Board, 2007). Using the Dole-Shalala Commission’s round number of 1.5 million of service members deployed (the number is now larger), this yielded 150,000 with narrow PTSD. The broad definition, encompassing all significant psychological injuries, produced an estimate by the DOD Task Force on Mental Health of 38 percent, or 570,000.

If the above number of those evacuated for “diseases/other medical” is inflated at all, it is more likely that it is from the policy of evacuating service members for diagnosis and treatment of conditions for which no appropriate specialist or sub-specialist had been deployed in the theater.

<sup>4</sup> Jonathan Shay, *Odysseus in America: Combat Trauma and the Trials of Homecoming* (New York: Scribner, 2002), 240.

Casualties <sup>5</sup> Within military circles, the tag “toxic leadership” is commonly used.

<sup>6</sup> I still get goose bumps when I recall that during the break at a Commanders’ Conference at the 101st Airborne, where I spoke, several battalion commanders came up to me and told me that they had required their troopers to read my book *Achilles in Vietnam: Combat Trauma and the Undoing of Character* (New York: Atheneum, 1994) prior to deployment, and that they could overhear admonishments among them, “Don’t betray what’s right!”

<sup>7</sup> Rivers of ink have been spilled on the Officer Personnel Management System and related practices and culture. My most important teachers have been Faris Kirkland, Carl Bernard, Bruce Gudmundsson, Donald Vandergriff, Franklin “Chuck” Spinney, James N. Mattis, Donn Starry, Walter Ulmer, Richard Trefry, Greg Pickell, John Tillson, Dan Moore, Chet Richards, Mick Trainor, Chris Yunker, and John Poole.

<sup>8</sup> Brett T. Litz, Nathan Stein, Eileen Delaney, Leslie Lebowitz, William P. Nash, Caroline Silva, and Shira Maguen, “Moral Injury and Moral Repair in War Veterans: A Preliminary Model and Intervention Strategy,” *Clinical Psychology Review* 29 (8) (December 2009): 695–706.

<sup>9</sup> Martha C. Nussbaum, *The Fragility of Goodness: Luck and Ethics in Greek Tragedy and Philosophy* (New York: Cambridge University Press, 1986), 417.