

**Quantum Restorying of the PTSD *Leviathan*:  
Posthumanist, Critical New Materialisms of Wider Agentic-Trauma of Military  
and Civilian Bodies**

David M. Boje  
New Mexico State University

For Proceedings of the 3<sup>rd</sup> Annual Quantum Storytelling Conference, December 15-  
17, 2013, Las Cruces New Mexico

**ABSTRACT**

I deconstruct White and Epston's classic restorying approach, to reveal its bias against several critical materialisms, including Foucault, who is said to be the cornerstone of their 'narrative means to therapeutic ends.' White and Epston limit their interpretation of Foucault to discourse, to the linguistic turn, and end up with a constructivism, a 'text' framework, where materiality is missing in action. My colleagues and I have just received funding to use restorying along with equine groundwork training to help veterans with PTSD and their families. The purpose of this essay is to develop a posthumanist and 'quantum restorying' approach. The 'new critical materialisms' included in this quantum restorying contribute a material  $\leftarrow \rightarrow$  discursive understanding of PTSD in a wider causal field called the *Leviathan of institutions*. PTSD is produced and sustained by Leviathan, a wider causal field than either conventional treatment or in restorying which blames the victim, the veteran as singularly agential. I include a reimagined set of steps of [quantum] restorying that serves as well as the critical new materialist underpinning of equine groundwork, how PTSD inflicts bodies in Leviathan. Ironically, human body-encounter with horse-body whose survival depends on an ever-present gaze of stress in other bodies.

## INTRODUCTION

My purpose is to relate posthumanist, critical new materialisms as alternatives to understanding and dealing with Post-Traumatic Stress Disorder (PTSD). I freely admit I am haunted by PTSD. It somehow infuses in my body not just in reliving memory, but how that 'observational apparatus' its agentic cut is produced by Leviathan. Leviathan of Thomas Hobbes is a forgotten materialism according to Samantha Frost (2010).

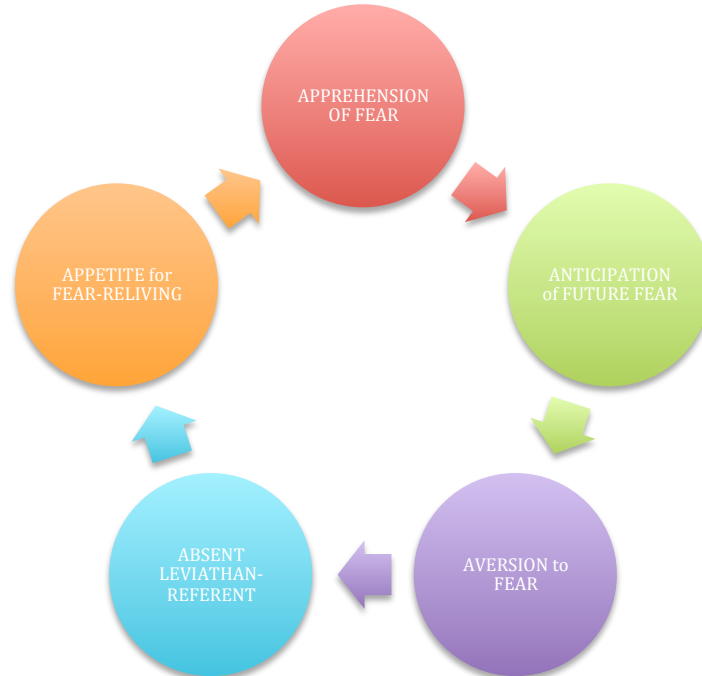
My thesis is Leviathan gives new insight into new critical materialism, a politics and economy of PTSD greatly oversimplified in textbooks. PTSD is the materialism of fear in relation to politics and economy. Hobbes' materialism gets a seat at the table with Hegel, Marx, Foucault, Merleau-Ponty, and Derrida. And Frost takes her place at the ever-extending table of posthumanist critical new materialist-feminists: Barad, Hird, Fusco, Cook, Coole, Haraway, and many others.

There is something important about Hobbes' Leviathan, for it aptly describes the specter of PTSD, its fear and politics. Hobbes' conception of fear is not emotion, nor hysteria. For Hobbes' "everything is material and matter" including the "Universe" all "Corporeall" (Frost, 2010: 159, Corporeall is how Hobbes spells it). Hobbes' materialism is counter to Descartes' Cartesian cut (as Barad calls it), dualist materialism. Hobbes' materialism, by contrast, mater is alive with aliveness, and liveliness in a Vitall way (again Hobbes' spelling). For Hobbes matter is simply alive, vitalistic, and people are wholly embodied, without nonbodily agent. Frost declares Hobbes is "evoking the specter of a subject that is not much more than a vehicle for the causal forces around it" (p. 160). Hobbes calls into question the existence of independent autonomous agency" (ibid, p. 160). This is important to PTSD, since in both the conventional VA conception and treatment, and in White and Epston (1990) restorying, there veteran has independent autonomous agency, self-determination of the PTSD, self-conscious memory of trauma. Hobbes would likely say the VA and Restorying foster the illusion of agentic autonomy, oversimplifying and truncating the causal field that is nonlinear, complex a "broad array of causal antecedents" (ibid, p. 160). PTSD is Leviathan, a global network of Institution Bodies producing its conception, instrumentation, and treatment modalities. This Leviathan is Vitall, moving, generative interacting Bodies, agents of the act, the passion, and the memory of PTSD. Hobbes makes the critical materialist claim that PTSD institutions collaborate Bodily the Leviathan, its network motion forces occasioning Veteran's 'syndrome' implanting the confluence of passions of PTSD. Leviathan constitutes PTSD in the imagination, the formations of re-memory, reliving the singularity event, in each Veteran's living story of life, while the nonlinear Vitall Leviathan causal field of institutional forces of action and agency is never called to justice. PTSD is a ridiculous oversimplification, a misdirection, reification and very fallacious restorying of Leviathan, in the whole storytelling of fear reduced to Veteran, while the guilt and complicity of Leviathan despite its history in Experience, its Effects, its institutional network of Bodies, its Vitall cultural and political habits, gets away with it. Leviathan is "Vitall motion" (ibid, p. 165).

Leviathan is embodied, in the “thinking-body” as Hobbes calls it, in the actions of VA, Medicine, University, Legislature, all that ongoing movement away from the very material object of the Veteran’s memory. Leviathan’s appetite and aversion feeds off the sensemaking of the veteran’s body, as Hobbes calls it “*Sight, Hearing, Smell, Tast[e], or Touch*” (as cited by Frost, p. 167).

Notice please how reliving the past, the common VA strategy of cure, is resituated differently if we resituate PTSD in the of Leviathan, which has been turned into absent referent, yet its offense is far from absent, as is the call for justice. Relived memory treatment is no cure for Leviathan, its transfer of agentic ac/countability (in the Derrida, 1994 spelling) to the veteran’s errant memory work.

As Derrida’s (1994) deconstructive materialism puts it, quoting Hamlet “time is out of joint.” The “spectral anteriority” (p. 21) is ‘out of joint’ with the presencing of the specter of the presencing of PTSD. The Leviathan as Hobbes calls it is an absent referent, a sign of anticipated/expected/foretelling of the future by rereading the past, all done errantly by linear- and/or cyclic-antenarrative as some regularly recurring movement, a repetition of veteran reliving event or memory. The tragic result is the veteran takes the Self as cause of the experience of trauma and its action, meanwhile the VA treatment amplifies aversion and appetite, while holding veteran ac/countable in ac/counts of autonomous self-agency.



**Figure 1: Leviathan-Veteran Cyclic-Antenarrative of PTSD-Fear**

Without an identifiable why and what, then Leviathan for the veteran remains an absent referent, closed in the recurring cyclic-antenarrative of apprehension without object, anticipation, leading to aversion, the absent-Leviathan-referent hides, increasing appetite for veteran to relive and re-enliven fear itself, as the dominant conventional treatment modality.

“If fear has no object, then no recursive movement around memory is possible, no simplification of causality can take place, and no anticipation of causality can take place, and no anticipating projection can occur” (Frost, 2010: 169).

In this essay I develop what I will call ‘posthumanist quantum restorying’ alternative for PTSD conception and treatment by deconstructing White and Epston (1990) preference for discourse that marginalizes several critical new materialisms, such as Frost’s re-invocation of Leviathan. I intend to reimagine Restorying from a critical new materialist standpoint, and recraft it into Posthumanist Quantum Restorying. This will have the result of changing the kinds of questions a coach asks about PTSD, so that the ways of PTSD materiality/ materializing/ materialization storytelling are balanced with the discursive aspects of PTSD storytelling.

My premise is PTSD has its Leviathan ways of materializing, so that PTSD takes on ‘aliveness’ a ‘self-organizing’ ‘living story,’ a career path of its own, materially and discursively, in a network of institutions. At the same time, the institutions produce particular brands of PTSD, and brands of observational apparatuses, and of treatment protocol. I will argue institutions for institutions quite materially establish all of these, be they medical, university, military, or clinical. As I will deconstruct, there are also cyber apps, sponsored by U.S. Department of Veterans Affairs, such as the PTSD Coach, an app that has a particular embedded material praxis of PTSD in its ways 17 questions, in its lessons, in its recommendations.

The new critical materialisms of Karen Barad, Mira J. Hird, Patrice Haynes, Jane Bennett, Deborah Cook, Diana Coole, and Samantha Frost contribute to *Posthumanist Quantum Restorying* the material/materializing/materializations of an absent referent, PTSD-Leviathan, in five ways:

1) PTSD inhabits living bodies in material ways (biochemical, psichio-biologic, psychic-memory-neurology).

2) PTSD is embodied in the Leviathan of military, State, University, Medicine, and other institutions (family, academic, clinical, pharmaceutical, neuroscience, etc.) all co-producing PTSD in veteran bodies in relation to other bodies with and without the syndrome of PTSD. This is my reading of Samantha Frost who develops a new materialism reading of Thomas Hobbes’ *Leviathan*.

3) PTSD is embodied in the habit and disciplinary material/knowledge practices of military industrial complex, and formations of late modern capitalism

where PTSD is recast as agentic singularity of veteran's errant memory work. This is a Foucauldian reading of new materialism

4) PTSD is materialized in 'observing instruments' and 'observing apparatuses as well as in treatment protocols, the agential cuts of Cartesians and of vital materialisms (Deleuze, Merleau-Ponty, Barad, Bennett, etc.).

5) PTSD embodies the human spirit that haunts veterans, families, the military, social sciences of diagnosis (instrument production & measurement), and clinical treatments.

This later is for Derrida (1994:136, citing Hegel) is a hauntology, and includes many spirits, specters, and apparitions:

"No, the world itself is an apparition" ... "wandering pseudo-body of a spirit, it is an apparition: ... "look near at hand or into the distance, you are surrounded by a ghostly world ... you see spirits" ... "you should not be surprised" ... "your spirit is a ghost haunting your body" ... "that you yourself are a ghost."

For Barad (2010), this 'specter of Marx' is as well a quantum hauntology, a metaphysics haunting physics and the *Copenhagen Interpretation*.

For Haynes' (2010) materialism, is a specter of transcendent immanence. Haynes seeks to construct an immanent transcendence that is a "non-reductive materialism" and she attempts following Kant, Hegel, and Nietzsche to overcome to duality of spirit and matter (p. 159). For example, Haynes is critical of Adorno and Horkheimer's 'Culture Industry' critique of the consumerist materialism of advertising that manipulates the desire of the masses. Haynes contends that the Culture Industry work does not overcome the duality of spirit and matter. "Adorno and Horkheimer seek to show how the spell of immanence reifies the world" (ibid.: 131). The abstract narratives of advertising reason become 'thing-like' and an 'unalterable objectivity' becoming according to Haynes, a "dreadful *re-enchantment* of the world" that "haunts modern disenchantment, particularly within the social realm where unjust social relations organized by the capitalist exchange principle, as well as the phallic economy, seem entirely natural, normative and beyond the control of individuals" (ibid.). This rampant disenchantment of the world makes transcendence taboo. The implication is that PTSD becomes a rationalized totality removed from the agential control of the self, and a myth of PTSD takes over that stigmatizes all forms of treatment as being outside the warrior's military code of conduct.

Las Cruces, New Mexico is host, next week to the third annual *Quantum Storytelling Conference*. Book by Boje (in press) and Boje and Henderson (in press) are partially the result of those conferences.<sup>1</sup> Their purpose is to develop a new approach to storytelling. Quantum storytelling is attentive to storytelling in spaces,

---

<sup>1</sup> See <http://quantumstorytelling.org>

times, and mattering. It is apart of a growing movement in social science, biology, and physics that attends to various materialisms that have been otherwise ignored in the linguistic turn, as well as the discourse turn. Karen Barad (2007: 182) has popularized *spacetime mattering* as quantum leaps, "jumps (large or small) through space and time... the intra-play of continuity and discontinuity, determinacy and indeterminacy, possibility and impossibility that constitutes the differential space-time mattering of the world." Posthumanist Quantum Storytelling is an embodied storytelling, in some cases a posthumanist critical materialist storytelling that addresses the processes of *spacetime mattering*.

Karen Barad (2013: 16) develops agential entanglements in a way that informs quantum restorying and quantum storytelling: "*a quantum dis/continuity. Each scene presented diffracts various temporalities within and across the field of spacetime mattering. Scenes never rest, but are reconfigured within, dispersed across, and threaded through one another. This dis/jointed movement is intended to produce a felt sense of différance, of intra-activity, of agential separability---differentiatings that cut together/apart---that is the hauntological nature of quantum entanglements.*"

Barad is one of a growing number of 'critical new materialists *feminists/posthumanists* along with Mira J. Hird, Diana Coole, Deborah Cook, Samantha Frost, Alecia Jackson, Lisa Mazzei, Donna Haraway, Koko Fusco, and our own wonderful Quantum Storytelling Conference scholars: Grace Ann Rosile, Gerri McCulloh, Tonya Henderson, Debra Hockenberry, Jillian Saylor, Krisha Coppedge, Maja Turenen, Marie Wilbanks, Anna Scott, Nazanin Tourani, new arrival Margaret Vickers and Carma Nez, and absent Anete Strand, Wanda Cousar, and of course the late Ivy Durant, her spirited presence still felt. There are some aspiring male critical new materialist (*feminist/posthumanist*) scholars: Joe Gladstone, Rohny Saylor, Mike Bonifer, Thom Pitz, possibly Jack Appleton, and myself.

Posthumanist quantum storytelling is defined here, as the interplay of material instrumentations, observational apparatuses, treatment instrumentalities, specter materializations of PTSD in the veterans' bodies, in relations with other institutional bodies, *with institution's master (aka grand) narratives* and the human's own *living stories* declared more agential and autonomous, while the absent object, the absent referent is Leviathan itself, producing PTSD in ongoing dynamic ontological relationships in *spacetime mattering* of a much wider causal field that renders veteran agentic impotent.

My presentation structure is as follows: First, the conventional operationalizations of PTSD in the material world of organizations, and its rendering as a trauma narrative, an errant memory of trauma that must be revived, replayed again and again. Second, the posthumanist, new critical materialisms' ways of understanding PTSD as a network of institutions producing it. Third, I problematize White and Epston (1990) approach of restorying. Fourth, develop a quantum restorying approach. Fifth, I present more detail on micro level analysis of embodied

aspects of quantum restorying and equine groundwork proposed for veterans and their families. Finally, there is discussion and conclusions of implications of posthumanist quantum restorying.

## **PART I: MATERIALIZING PTSD AS ERRANT MEMORY OF AUTONOMUS AGENTS**

**What is PTSD?** “PTSD is a medically recognized anxiety disorder that can develop from seeing or experiencing an event that involves actual or threatened death or serious injury to which a person responds with intense fear, helplessness or horror, and is not uncommon among war Veterans” (VA, 2010).

**What is PTSD Genealogy?** PTSD has a history, morphs and changes, adapts to situations. In its historical materialism, PTSD, as I understand it, began as a struggle in feminism to get states to recognize women are not the possession of men, as a hysteria in reaction to physical, emotional, and economic abuse. I think Louisiana still does not recognize the non-possession in their statutes to redress such abuses. Folchman (2004) deconstructs the sociopolitical response to violence against women.

With the Vietnam War (and before that in rape and battered women, in first and second generation Holocaust survivors, cancer patients, children incarcerated in juvenile detention (Kerig, 2011, 2012). Gross and Graham-Bermann (2006) deconstruct ways PTSD sustains categories of gender that are oppressive and powerful, the ecosocial and cultural contextualizations.

PTSD was given new life in military institutions, as a new label for combat fatigue, nervous breakdown. The genealogy of PTSD, its materialization in a network of interacting institutions is critical to understand. PTSD was initially something female, a hysteria following rape, battering, and emotional trauma events. With Vietnam, thousands of service men and women experienced trauma events. Advocacy for the PTSD diagnosis to be recognized in the military was critical accomplishment, and the range of clinical concepts applied to PTSD increased rapidly and dramatically. The major treatment was desensitization by reliving the memory again and again. As a Vietnam veteran, I believe this treatment is problematic. Memory is not a full-blown tape recorder, where replaying trauma, desensitizes.

The range of contexts in accumulating clinical concepts of PTSD increased dramatically since Vietnam. The diagnosis puts on the side biological theories of mental illness and therefore has a strong pull on anthropologists looking at its social roots. Does this view of PTSD as coil causation need rethinking (deconstruction). Some people are exposed to horrific events such as war, accident, hurricanes, abuse, rape, and do not develop PTSD. Is PTSD a culture-bound syndrome or is it something more institutional?

It depends on what counts as PTSD and for how long. For example, According to Smid (2011) delayed PTSD must be diagnosed by individuals fulfilling criteria if the onset of symptoms is at least six months after the trauma. Smid's thesis establishes the prevalence of delayed PTSD using a meta-analysis of disaster survivors. Delayed PTSD did not decrease between 9 and 25 months after the traumatic event. Lack of perceived social support was stressful, introducing exposure to institutional stressors.

The symptoms of PTSD (nightmares, sleep disturbances) can be symptoms of other disorders such as depression. Social and interpersonal withdrawal, avoidance of situations of potential stress, and other symptoms become part of a clinical narrative of some underlying pathology. There is a strictly statistical deconstruction of PTSD syndrome, showing its auxiliary relation to other syndromes. Andrews, Slade, and Issakidis (2002) deconstruct the singularity of PTSD by revealing its association to depression, compulsive obsession disorder, and anxiety disorders. Maier (2006) deconstructs PTSD's A-criterion.

There is also a movement deconstructing PTSD narrative, its textual construction, questioning the employment of PTSD as a syndrome of errant memory, and the consequences, how reliving trauma memory is less than helpful, maybe entirely harmful.

"The connection between event and symptom, in this clinical narrative, is carried by a particular form of memory, the traumatic memory, in which the traces of the event resist the flow of biographical time, breaking through the past into the present" (citing Young, 1995; in De Jong, 2005: 363).

Pineless et al. (2009) deconstructs how PTSD shows attentional biases and how the majority of the studies use methods unsuited for differentiating disengaging-attention from threatening stimuli (interference). Spiegel (2001) deconstructs PTSD as often only be known by the self-reports of the patients, as opposed to observable phenomena such as blood pressure, heart rate. The validity of a particular symptom can always be challenged.

Beckman, Feldman, and Kirby (1998) deconstruct how PTSD is confounded with the materiality of atrocities, the severity of guilt and hindsight responsibility for wrongdoing during combat, such as committing violence toward others.

Now PTSD has become a "prominent cultural model" with a synergy between suffering and human rights, political advocacy, and traumatic stress advocacy (Breslau, 2004, De Jong, 2005). PTSD owes as much to political stances of its original authors in the Diagnostic and Statistical Manual of Mental Disorders, as it does to symptomology strictly on the basis of phenomenological, or behavioral descriptions. Bracken (1998) deconstructs PTSD, as having hidden institutional agendas. Edkins (2003) argues that remembrance does not have to be nationalistic



but can instead challenge the political systems that produced the violence in the first place.

There are posthumanist quantum storytelling implications for Post-traumatic Stress Disorder (PTSD and related stress-trauma syndromes). The posthumanist quantum storytelling dynamics of discursive structurations with mattering manifestations/materialization of PTSD have material-bodily consequences: "People with PTSD often experience emotional numbness, sleep disturbances, outbursts of anger, and life problems resulting from the avoidance to traumatic reminders" (Collie et al., 2006: 157). The scale magnitude of PTSD is enormous.

By conventional wisdom, PTSD is not only from combat or terrorism; it can accompany serious accidents, physical or sexual assault. In immersion (repeated re-exposure) a desensitization therapy, whose focus is on re-experiencing and reliving the trauma in flashbacks, combined with behavioral therapy of going to places a person has been avoiding to resolve isolating from others, detaching from surroundings, feeling helpless, having panic attacks, and/or feeling numb, and feeling on guard, irritable, being easily startled and having trouble sleeping or staying asleep. PTSD symptoms may lead to problems in work, family, social, and school life. About 7% of the general U.S. population will have PTSD in their lifetime, with women being twice as likely as men (20% for women, 8% for men). With combat, rape, abuse, accident, etc. the rates get much higher.

The conventional military focus of PTSD definition, diagnosis, and treatment is that it is agential to the veteran.

"Following exposure to trauma, most people experience stress reactions but many do not develop PTSD. Mental health experts are not sure why some people develop PTSD and others do not. However, if stress reactions do not improve over time and they disrupt everyday life" (VA, 2013b).

One example, prominent in the military is called the *The Warrior Myth* (Archer, 2013: 7):

"A ... rhetorical obstacle concerns how historical, cultural discourses about the bodies and minds of military service members impede better understanding of PTSD. Politicians, the Pentagon, and mainstream media venerate today's U.S. soldiers with a consistency and intensity that has all but established the warrior as the ideal U.S. citizen."

By 2008, 1.6 million troops had deployed to Afghanistan and Iraq; 16% had lost consciousness at least once during deployment in vehicle crashes or blasts; estimates are that 13 to 17% of active duty military personnel suffer PTSD (Hoge, Terhakopian, Castro, et al., 2007; Hoge, Castro, Messer, et al., 2004; Schneiderman,

A. I.; Braver, E. R., Kang, H. K. (2008). The materiality of PTSD is inseparable from the storytelling of PTSD, both of which are agential, and intra-actively agential (Barad, 2003, 2007).

Trauma memories and experience are often treated as merely "pre-narrative," not fully formed into a coherent narratives of the trauma experiences by the veteran returning from combat zones (Mollica, 1988; van der Kolk & van der Hart, 1991).

According to National Center for PTSD (2013), several recent studies have found that veterans' PTSD symptoms can negatively impact family relationships and that family relationships may exacerbate or ameliorate a veteran's PTSD, its material manifestations, and on or links to other stressor conditions. Research findings, to date: veterans with PTSD conditions are more likely to report marital or relationship problems have higher levels of parenting problems, and generally poorer family adjustment than Veterans without PTSD (Jordan, Marmar, Fairbank, Schlenger, Kulka, Hough et al., 1992; Mikulincer, Florian, & Solomon, 1995; Riggs, Byrne, Weathers, & Litz, 1998).

Kerig et al. (2012) study attempts to show that interpersonal trauma, PTSD symptom clusters differentially mediate relations between trauma exposure and mental health problems. There are gender differences, for males non-interpersonal traumas related to PTSD symptoms, for females re-experiencing the arousal mediated internalizing associated symptoms of PTSD which acted as a mediator of externalizing.

Traumatic events may result in nonspecific pathological identity alteration of consciousness, as specter of fear; a spectral PTSD takes over the person, in a pathological way of a trance, an experience of possession. The personal narrative of PTSD spirit possession is different from the controlled spirit possession by traditional healers, shamans, those in temporary animal or ancestral spirit possession trance.

When PTSD is a possession trance disorder (PTD) takes over the narrative identity of the person. The symptom is disruption of the usually integrated functions of consciousness, memory, identity, or perception of the environment. For shamans (PTD) is cultural, a part of regular collective practices located in particular cultures, such as a possession trance that possesses personal identity with a new (spirit) identity during the journeying. That is different from a pathological possession trance (PPT) where possession by a spirit is not willing, or controlled by discipline and practice.

"A first-ever community-based, psychiatric epidemiological study among shamans that indicated no evidence that shamanism is an expression of psychopathology" (De Jong, p .365 citing Van Ommeren et al., 2004). The karma of PTSD spirit

A cultural and anthropological approach to PTSD, its symptomology (and related disorders such as traumatic stress, anxiety) and treatment modalities is of immense importance to the debate about the efficacy of reliving the memory versus a restorying approach.

PTSD is already a Western cultural model for understanding and caring for suffering human beings. While it is a recognizable diagnostic (observing) apparatus in a variety of cultures, PTSD involves complicity with the promoters and sellers of PTSD instrumentalities. PTSD is situated within interdependent military, medical, university, and political institution contexts, in interorganizational agreements about diagnosis, treatment practices and eligibility for reimbursement.

Many of the studies just reviewed are deconstructing the everyday medical storytelling that sustains the professions of PTSD identification, its instrumentation, treatment, etc.

In sum, neurologists call PTSD a neurological disorder, where stressors alter brain structures. In contrast an institutional analysis privileges a framing of PTSD as a political agenda on a national and sometimes global stage. The diagnosis has increased substantially as it became a bottom-up activist agenda to secure treatment for veterans and families, and from top-down as it was the basis for funding university research projects (as the pie for such funding grew smaller, and state legislatures cut university funding). Now global organizations such as the UN, WHO, and World Bank show interest in PTSD (De Jong & Osterman, in press). Each is advancing their political agenda on the global stage. Meanwhile feminists are looking at ways PTSD is diagnosed and its treatment for rape, domestic violence, etc.

These are forces expanding and amplifying the PTSD paradigm as a diagnostic category applicable to wider groups and populations from an ever-increasing range of treatments. There is a competition among treatment and intervention programs, where some are elevated at the expense of others. Right now expensive neurological labs with virtual equipment to simulate trauma trigs for memory revivification are being funded in the Obama administration. To what extent is PTSD a culturally and politically, and institutionally induced phenomena?

Next, I develop posthumanist, new critical materialisms' understandings of PTSD, its materialization in networks of institutions.

## **PART II: POSTHUMANIST, NEW CRITICAL MATERIALISMS' WAYS OF UNDERSTANDING PTSD AS A LEVIATHAN NETWORK OF INSTITUTIONS PRODUCING IT**

I am questioning to what extent the PTSD experience in this grip is the result of the VA process, its diagnostic observational apparatuses, the gauntlet of getting

PTSD benefits, the stigma of being found out by peers and command --- constitutes stressors that are institutional and politically adverse conditions? The political Leviathan aspects of PTSD diagnosis, aberration of observational apparatuses, and treatment modalities are points of concern.

**The Agential Cuts of Quantum Restorying** - The construction of a coherent unitary institutional narratives of trauma is a military, psychological, a psychiatric, and even a positivist behavioral-cognitive achievement, and an economy of grand, master, or dominant narratives of many kinds of organizations that recruits the veteran into particular 'frameworks' and 'roles.' Karen Barad (2003: 815) defines two kinds of agential cut: what we call 'living story,' "enacts an *agential cut*... in contrast to the Cartesian cut---an inherent distinction---between subject and object... effecting a separation between 'subject' and 'object.'" Each narrative framework and each living story enacts and refracts the agential cuts in ways that are felt in the scenes of storytelling dynamics. Each framing of PTSD is agential because the 'agential cuts' not only frame the sources, causes, and individual efficacy of PTSD, the way of framing is agential, a 'cut' of what is object and subject, antecedent and consequence, into a virtual career of PTSD, its stages, its role relationships, and its emplotment into beginning, middle, and end. This can happen before a veteran returning from combat (or even before they depart) have been able to articulate their own 'living stories' of their own experience, and 'frame' their own identity in authentic ways. Authentic here refers to an ontological meaning, to how the veteran Being-in-the-world of family, military, media, welfare, academic, medicine, therapy, and political institutions.

Following Barad (2003: 815) agential cuts enact "inherent ontological indeterminacy" and "*agential separability*." Each institution has different narrative frameworks of the roles, plot, and career phases (agential cuts) of veterans experiencing PTSD. Moreover together, in all its storytelling, the institutional narratives with the veteran's own living stories of aliveness in the face of death, as well as what is unstoryable (as yet un-narrated trauma of combat) is the *agential separability* of storytelling despite the cuts into subject and object, observer and observed, and measurable effects and measured object.

Barad (2010: 32) goes on to give qualifications to the definition for what we call 'quantum storytelling' (ibid, p. 246): "Quantum dis/continuity is no ordinary disjunction. *Agential cuts* do not mark some absolute separation but a cutting together/apart - a 'holding together' of the *disparate* itself ... without wounding the dis-jointure, the dispersion, or the difference, without effacing the heterogeneity of the other ... without or before the synthetic junction of the conjunction and the disjunction... Agential cuts radically rework relations of joining and disjointing." (Barad, 2010: 265). She continues:

"The quantum dis/continuity queers the very notion of differentiating. It offers much-needed rethinking of ac/counting, taking account, and accountability that isn't derivative of some fixed notion of identity or

even a fixed interval or origin. Ac/counting – a taking into account of what materializes and of what is excluded from materializing – cannot be a straight forward calculation, since it cannot be based on the assumed existence of individual entities that can be added to, subtracted from, or equated with one another....”

Matter in Western culture has been viewed as “devoid of agency” a mere collection of things instead of a “lively materiality” that is “self-transformative: and already “saturated with the agentic capacities and existential significance that are typically found in a separate, ideal, and subjectivist, realm”(Coole, 2010: 92).

Diana Coole (2010) develops ways in which Maurice Merleau-Ponty provides critical new materialisms, and contributed ideas such as ‘folded flesh’ and “ontological ‘fold’” that Deleuze (“multiplicity of the folds”), Foucault (“subjectivization of the fold” & “moving matter”), and others use, but often don’t acknowledge (p. 108). Oddly enough, Coole does not treat Barad as a key and influential source for agentic vitalism of materialism. On the other hand, Barad does not address Merleau-Ponty. Nevertheless, Coole, Barad, and Merleau-Ponty share distrust in explanations of materialization rooted in what Coole calls “mysticisms derived from animism, religion, or romanticism” (Coole, p. 92).

Renée “Descartes had rejected the materialist arguments that everything is matter” constructing instead a duality of ‘rationalist materialist’ empirical observation of extended substance and a separate ‘thinking substance’ (ibid, pp. 94-5).

Merleau-Ponty’s ontology has implications for the veterans and families, who occupy space, and time, and a materializing that is not “emptied of all immanent vitality” as in Descartes’ materialist ontology that dualizes subject from object materiality. “The body literally incarnates material capacities for agency” in a formative process of consciousness “enmeshed in this material world” (Coole, p. 101). Merleau-Ponty’s ontology, by contrast, subject and object are interwoven in the life world that is conceptualized materiality of the nexus of folds, doubled, and even tripled and reversible flesh (ibid, p. 96).

Merleau-Ponty’s provides implications for veterans ontologically situated in lived experience of bodies that are enfleshed, in the world of brutish combat zone experience, rather the reified and objectified PTSD theories or lived experience reduced to physico-chemical processes and maps of cause and effect relationships. Rather the veterans are “bodies as beings-in-the-world” engaging with other bodies in “vital communication with the world” (ibid, p. 93). PTSD, on the other hand, is the “freezing of being” (p. 93) into Descartes’ materiality, the “Cartesian matter” that is “without vitality” of “self-transformation” (p. 99). For Merleau-Ponty, it is “nature naturing” materiality producing itself, in the “primordial ground” rather than mechanical replication (ibid, p. 97-8). The implication is that PTSD materiality and materialization is “materially multidimensional, contingent, and overdetermined”

by folds and reversals (ibid, p. 101). There is no “pristine material reality awaiting discovery” and a “reflective consciousness: (ibid).

The body of the vet is already entangled and entwined in the *wild being* of the lifeworld’s creative material processes, its “rhythm of existence” and its agentic capacities of “corporeal space [that] is lived spatializing, oriented to a situation wherein the lived/living/lively body embarks on an architectural dance that actually spatialized (and temporalizes) through its movements, activities, gestures” and where idealism and realism are antithetical (ibid, p. 102).

Vets bodies are moving, spatializing and temporalizing within the wild being of the military, and that “introduces patterns, intervals, duration, and affects into Cartesian or Euclidian space from within it, and it continuously reconfigures its own corporeal schema in responding to and recomposing its milieu (*Umwelt*)” (ibid, p. 102).

The military body is caught up in a “polymorphic” “intercorporeal field” a triad of “folded matter” and “folded flesh” (ibid, pp. 104-7): (1) mechanistic-materialism, (2) romantic-vitalist-destining materialism and (3) the intermediary barbaric reality of opening action of combat zones. The military body is enveloped in its environment, in the operative inhuman mechanistic (rifles, grenade launchers, Humvees, etc.), in the organic (biological life), and in spacetime of “the opening of a field of action” and the “intermediary reality” of future-oriented vitalism, the “emergent open field of action” of a human species in combat environment, “the immanent generativity of existence” (ibid, p. 103, 106). The “spatiotemporal field” and its many folds, is what Merleau-Ponty calls the Chiasm of visibility and invisibility, being touched and touching in the “double sensations: of Being flesh and the “self-transformation” of the agentic materialisms (p. 107).

**The Specter Haunting Descartes’ Materialism** - Merleau-Ponty does not appeal to a transcendent God accomplishment of material perfection, as in Descartes. That is Descartes’ “specter of skepticism” his storytelling is “entirely theological in its infrastructure,” the dependency on an external existence of God who designs and “God’s agency” administers his “cosmic machine” however it is “devoid of animalistic or human spirit” (ibid, p. 95, 98-9). This paves the way for Newton’s mechanistic physics. They both broke away from the *physis* of Aristotle’s materialist and metaphysical teleology of *energia*, *potentia*, and *final cause*. Merleau-Ponty does not dualize nature/materiality, or conjure a specter of God’s perfection.

Merleau-Ponty objects to Cartesian dualized material ontology, preferring ontology of immanence of matter, the “productive immanence of matter” in contrast to Descartes and then Newton’s mechanistic accounts. As a critical new materialism, Merleau-Ponty’s is critical of Kant’s *a priori* transcendental that vacates nature of vitalist agency of “nature’s contingent exuberance” for a transcendental force of universal laws (p. 99). As with Descartes and Newton, Kant’s transcendental destroys the “productive immanence of matter” its fecund primordial ground (ibid,

p. 99). Judeo-Christian theology treats perfection of nature as destined, whereas the Pre-Socratic materialism nature has an agency not in any Godhead. The Descartes, Kant, and Newton specter of God's external perfecting agency haunts their materialisms, destroying "possibility for self-transformation" of vitalism, generativity, and virtuality (ibid, p. 99).

Schelling attempts a material vitalism that is antecedent "anterior to reflection: a terrifying and barbaric excess that the fundamental stuff of life" he anticipates has a "common thread running through many new vitalisms and materialisms" (Coole, 2010: 99). For example, Patrice Haynes (2010) turns the philosophy of material immanence into a romantic and theological mysticism in her 'critical new materialism' that continues the teleological and theological mystification. She revives the immanence of the 'human spirit' in an internalized 'Absolute Spirit' that retains a humanist approach to vitalism of external agency akin to that of Descartes, Newton, and Kant. Romantic immanence has its own "violent political legacy: as does the Hegelian and Marxian *"Adventures of the dialectic"* (Coole, 2010: 100).

Merleau-Ponty's ontology is "unmediated fusion" in a "wild-flowering world" (Coole, p. 100-101) that holds together the Cartesian cut that Barad (2010) invokes as an alternative to the critical new materialist 'agential cut' that joins and disjoins simultaneously.

The conventional PTSD focus is on the 'painful memories' of a specific trauma experience, and on symptoms that disrupt living, including avoidance, defensiveness, and sleep deprivation, which can if untreated lead to more lasting PTSD symptoms.

"Since Sept. 11, 2001, more than 2.5 million American service members have been deployed to Iraq and Afghanistan" (VA, 2013a). Military service exposes personnel to material conditions called 'stressors' (ibid): "stressors, including risk to life, exposure to death, injury, sustained threat of injury, and the day-to-day family stress inherent in all phases of the military life cycle."

"Some Veterans may have been living with posttraumatic stress or PTSD for a long time without knowing it. No matter how long it's been, there are effective treatments that can help you with your PTSD symptoms" (<http://maketheconnection.net/veterans>).

There is an industry, an economy of public and private, institutions, including universities collaborate (coalesce) to prevent, diagnose, and treat the materializations of PTSD stressors:

"To improve prevention, diagnosis, and treatment of mental health conditions, the President released an Executive Order directing the Federal agencies to develop a coordinated National Research Action

Plan. The Department of Defense, Department of Veterans Affairs, the Department of Health and Human Services, and the Department of Education came forward with a wide-reaching plan to improve scientific understanding, effective treatment, and reduce occurrences of PTSD, TBI, co-occurring conditions and suicide” (VA, 2013a).

June has been declared PTSD awareness month (VA, 2013b), to spread the news, the “VA provides effective PTSD treatment for Veterans and conducts extensive research on PTSD, including prevention of stress disorders.” There is a stigma associated with PTSD that prevents many veterans seeking effective PTSD treatment (VA, 2013b):

“Many barriers keep people with PTSD from seeking the help they need,” said Dr. Matthew Friedman, Executive Director of VA’s National Center for PTSD.

“Knowledge and awareness, however, are key to overcoming these barriers. ... Greater public awareness of PTSD can help reduce the stigma of this mental health problem and overcome negative stereotypes that may keep many people from pursuing treatment.”

Institutions, such as the U.S. Department of Veterans Affairs (VA, 2010) have implemented new rules regarding what constitutes PTSD: “This nation has a solemn obligation to the men and women who have honorably served this country and suffer from the often devastating emotional wounds of war,” said Secretary of Veterans Affairs Eric K. Shinseki. “This science-based regulation relies on evidence that concluded that a Veteran’s deployment to a war zone is linked to an increased risk of PTSD” (ibid, VA).

“No longer will vets who've suffered fear and trauma have to come up with dates, names, casualties, and all that detail. The new rules provide that if a veteran can show service in a war zone and that duty there caused them to develop PTSD they can qualify for disability benefits of up to \$2,700 a month along with free health care” (Bowser, 2010, online pbs.org; the new rules are at VA, 2010).

Rather, “Under the new rule, VA would not require corroboration of a stressor related to fear of hostile military or terrorist activity if a VA doctor confirms that the stressful experience recalled by a Veteran adequately supports a diagnosis of PTSD and the Veteran's symptoms are related to the claimed stressor” (VA, 2010).

### **Institutions Materializing PTSD**

“VA is proud to join with its partners in the federal government and the academic community to support the President’s vision and invest



in research that could lead to innovative, new treatments for TBI and PTSD," said Secretary of Veterans Affairs Eric K. Shinseki (VA, 2013a).

Within the next six months DoD will establish two new Research Consortia of universities and the VA by investing \$107 million to alleviate PTSD. Each public-private partnership is developing a more material understanding of PTSD (VA, 2013a).

University of Pittsburgh is using high definition fiber tracking to diagnose Traumatic Brain Injury (TBI).

University of Wisconsin-Madison is producing non-invasive neurostimulation therapy for TBI patients (VA, 2013a).

University of Texas Health Science Center (San Antonio) is developing 'biomarkers' that can be useful for diagnosis and for the development of PTSD therapies.

Virginia Commonwealth University will study neurotrauma effects of concussions, chronic mild TBI, neurodegeneration, and related conditions.

New Mexico State University will study the materialization of PTSD using Quantum Restorying as an alternative to Constructivism PTSD, and Immersion (repeated exposure) therapies.

There are many PTSD professionals being hired, including peer coaches. For example June 3, 2013, the VA (2013c) announced hiring 1607 mental health clinical providers, and another 2005 to fill existing vacancies, plus 318 peer specialists (of 800 openings).

PTSD is materialized/materializing in other more virtual ways. The National Center for PTSD ([www.ptsd.va.gov](http://www.ptsd.va.gov)) offers material resources (VA, 2013b):

- PTSD Coach mobile self-help and non-self help apps providing symptom-management strategies and treatment companion apps that are always with you when you need them (2013b):



- [PTSD Coach](#) This mobile app is to help you learn about and cope with the symptoms related to PTSD that commonly occur following trauma. It includes Tools for screening and tracking your symptoms.

I downloaded it for iPad (you have to go to the website instead of the apps administrator to find it). The virtual PTSD coach asks you to select “friends, loved ones, and/or professionals who can help when you’re feeling stressed, pictures on your phone that find comforting... songs ... you find relaxing or that put you in a good mood.” I followed the instructions, downloaded some favorite photos, but when it came to songs the app froze. Interacting with materiality can be difficult, stressful. I reloaded the app, and skipped the songs. I completed the self-assessment of 17 questions on a scale not at all, a little bit, moderately, quite a bit, extremely. I will give you the first eight, to give you an idea of the ideology behind the 17 questions:

1. **In the past month, how much have you been bothered by repeated disturbing memories, thoughts, or images of the stressful experience?** I chose “quite a bit” since preparing the grant, writing the Quantum Storytelling conference paper brings back memories.
2. **In the past month, how much have you been bothered by repeated disturbing dreams of the stressful experience?** I answered, “not at all” but had other disturbing dreams, ‘a little bit.”
3. **In the past month, how much have you been bothered by suddenly acting or feeling as if the stressful experience were happening again (i.e. as if you were re-living it)?”** I chose “moderately” but its not the same experience, and I am re-living the stress, the feeling but not the images.
4. **In the past month, how much have you been bothered by feeling very upset when something reminded you of the stressful experience?** I

- chose 'a little bit' and it's just the bothered part I relate to, as I am not clear which stressful experience, now or then, prompted the feeling.
5. **In the past month, how much have you been bothered by having physical reactions (e.g. heart pounding, trouble breathing, sweating) when something reminded you of the stressful experience?** Again 'a little bit' but not sure what the experience is, or if it is the Vietnam experiences.
  6. **In the past month, how much have you been bothered by avoiding thinking or talking about the stressful experience, or avoiding having feelings related to it?** This is a double-barreled question, I will answer the parts separately, with each getting 'a little bit.'
  7. **In the past month, how much have you been bothered by avoiding activities or situations because they reminded you of the stressful experience?** I answered 'a little bit' because I do still withdraw into hours of mindless TV to avoid situations that remind me.
  8. **In the past month, how much have you been bothered by trouble remembering important parts of the stressful experience?** I answered 'not at all.' I can recall all that I can recall.
  9. **In the past month, how much have you been bothered by loss of interest in activities that you used to enjoy?** Actually 'quite a bit' as I was enjoying the book reading in the evening, but lately I relapsed into the mindless TV.
  10. **In the past month, how much have you been bothered by feeling distant or cut off from other people?** I selected 'moderately' since I do cut off from other people to avoid stressful situations, and reactions.
  11. **In the past month, how much have you been bothered by feeling emotionally numb or being unable to have loving feelings for those close to you?** I chose 'a little bit' since sometimes I was not as loving as other times.
  12. **In the past month, how much have you been bothered by feeling as if your future somehow will be cut short?** Dude, 'moderately,' I'm turning 66, so my future will be cut short soon enough.
  13. **In the past month, how much have you been bothered by trouble falling or staying asleep?** I chose 'moderately' since its finals week, the conference is coming, the grant had to be rewritten, I just put out two books, and two book proposals.
  14. **In the past month, how much have you been bothered by feeling irritable or having angry outbursts?** Again 'moderately,' and I wonder about that.
  15. **In the past month, how much have you been bothered by having difficulty concentrating?** I chose 'not at all.'
  16. **In the past month, how much have you been bothered by being 'superalert' or watchful or on guard?** I chose 'a little bit' since there are those new gang of Dobermans on the path I usually walk with my furr-friends Sparky and Honey.
  17. **In the past month, how much have you been bothered by feeling jumpy or easily startled?** This one is constantly with me, 'quite a bit.'

Adding up the scores, the PTSD Coach (app) tells me: “Reactions like yours are normal. Many people who experience a trauma have this kind of reaction, at least for the first few weeks or months after the trauma.” Yes, but for me its been 45 years! In another part of the app “learning about PTSD” it qualifies this for some 30% of us “symptoms can last for many years” and “can stay at a fairly constant level of severity” or “can worsen during times of stress or when trauma survivors are reminded of the trauma (e.g., anniversaries).” Back the assessment, he app says, “You may have other trauma-related problems that this assessment would not identify, such as depression, substance abuse, or anxiety.”

I explored managing the PTSD, and was presented with this screen of eight options:

“What’s Wrong?”

1. Reminded of Trauma
2. Avoiding Triggers
3. Disconnected from People
4. Disconnected from Reality
5. Sad/Hopeless
6. Worried/Anxious
7. Angry
8. Unable to Sleep

On each of those screens I can rate my distress on a scale of 0 to 11. Distress is defined as “everything negative you are feelings, including anger, sadness, fear, and so on, all in one score.” For example in the ‘Disconnected from Reality’ I entered ‘7’ and was taken to a Progressive Relaxation exercise that takes 9 minutes.

I checked out the recommended PTSD treatments on my app. “The best evidence supports cognitive behavioral therapy (CBT) for PTSD.” Also good is “Eye Movement Desensitization and Reprocessing, or EMDR” and finally various “medications called Selective Serotonin Reuptake Inhibitors, or SSRIs.”

There are other apps on the VA website (VA, 2013b):

- [CBT-i Coach](#) This mobile app will help you get the most out of Cognitive Behavioral Therapy for Insomnia so that you can develop good sleep habits and sleep better. CBT-i Coach is best used while in therapy with a provider.
- [PE Coach](#) A mobile app to be used during Prolonged Exposure (PE) therapy with a mental health professional. PE Coach is not a self-help tool.

There are related apps:

- [Stay Quit Coach](#) A free mobile app that helps you stay quit after you stop smoking with tools to control cravings, reminder messages, and support links. This app is best used while in treatment with a therapist or after your treatment has ended.

There are courses in PTSD education online:

- [Continuing education](#) opportunities for providers, including PTSD 101 courses, on the best practices in PTSD treatment (CEs/CMEs offered).
- [AboutFace](#): An online video gallery of Veterans talking about PTSD and how treatment can turn your life around.

By last count, there are 33 PTSD apps downloadable for my iPad.

The apps are specters, a hauntology. For Barad, this is as well a quantum hauntology, a metaphysics haunting physics.

I think you all would agree with Grace Ann Rosile (2007: 187) “We are not physical beings lining to be spiritual’ rather, we are spiritual beings living to be physical.” Ian Mitroff (2002: 41) did a spiritual audit of Corporate America and found that 92% of people want to practice spirituality in the workplace. Spirituality is not the same at religion. Rather, there are many different spirits in the work place, already haunting it. Jacques Derrida (1994: 3-4) says, “... if the specter is always animated by a spirit, one wonders who would dare to speak of a spirit of Marx, or more serious still, of a spirit of Marxism.” None other than Karen Barad (2010: 240) wrote about ‘quantum entanglements and hauntological relations’ in ‘spacetime enfoldings’ and ‘justice-to-come.’ Therefore it is not a stretch of your imagination, nor suspension of belief, to say, there is a hauntology of Tamara-land that is quite the quantum storytelling. Quantum storytelling is agential, a vitalism, but is it part of the haunting?

This sociality is what Jacques Derrida (1994: 21) calls, “spectral anteriority.” Here are some summary definitions:

**Spirit/Ghost** – they are invisible yet living, but without flesh and blood.

**A Specter** – a manifestation of a spirit of ghost; not in flesh and blood, yet they have a manifest presence.

**Spectral** – is the plurality of specters, that are manifestations of spirit/ghost, and these are different from apparitions.

**Apparition** – a signal or sign that there is a specter there, or here. Could be a sound, a movement, a sensing of presence.

**Anteriority** – The quality of being in front of, placed ahead, yet appearing before in time as one looks forward. Anteriority is going before in time sequence, preceding or earlier, the events are anterior to what is about to breakout. The anterior of the body, such as the belly, that precedes the arrival of the rest of the body.

**Spectral Anteriority** then is defined here, as the plurality of spirits vying for control in late modern capitalism, i.e. various spirits of capitalism, each with their specters, and apparitions (signs & signals of their presence) arriving ahead of both

antenarrative and narrative. There is no flesh and blood in any of them, not in spirits, specters, or apparitions. The spirits are invisible yet present. The specters costuming, masks and visors are visible, yet they have no flesh and blood of their own. The apparitions are signs and signals, and we make sense of those everyday.

**Anteriority and antenarrativity** are *spacetimemattering* ‘out of joint.’ Specters are conjured and exorcised to get it back in joint, to find the path that went astray.

Derrida (1994: 21) calls this sociality a ‘hauntology’ and a “spectral anteriority.” The relevance to quantum storytelling is that Karen Barad (2010) entered the hauntology, declaring after her reading of Derrida (1994), that specters are haunting the *Copenhagen Interpretation*. " As Barad (2013: 22) tells of the hauntology: "Stage Left: A shot of Thomas Young and his famous two-slit experiment (An experiment Thomas Young famously performed, but probably never did.) The two-slit experiment--- the greatest ontological sorting machine of all time. Thomas Young is lecturing... Some audience members clap when Mr Young has finished. Others have already left in frustration and have asked for a refund of the ticket price...." The quantum storytelling "specializes: not by an ontology of the "Being of beings" rather by a "hauntology" (ibid, p. 51). Quantum storytelling is the observer effect that "transforms what it interprets" (bid, p. 51). Quantum physics is itself a haunting (Barad, 2010) of Newtonian mechanistic interpretation. Bohr and Eisenberg, are the spirits of quantum mechanics, and the Copenhagen Interpretation.

Ghosts are at most every workplace: ghosts of the founders, ghosts of people who worked there and are now departed, and the ghosts of generations of people who will work their or be customers there and are as yet unborn. These spirits have apparitions we call specters. I have some haunting spirit and ghost stories to tell. Between the death of past deans and presidents of our university, and the generations of them yet to come, we are living, working and teaching among their animating specters.

**Table 2: Short List of Seven Ghosts of Late Modern Capitalism**

<b>Dead Scholars</b>	<b>Ghosts</b>	<b>Specters</b>
1. Adam Smith (1723-1790)	Invisible hand, a spirit of self-interest will set things right in free market of <i>Wealth of Nations</i> .	The specter of state interference haunts the invisible hand (spirit of self interest)
2. Karl Marx (1818-1883)	Marx sought to exorcise historical materialism from the spirit dialectic of Hegel, however Marx from his dissertation to his last writing, keeps conjuring ghosts, and exorcising more and more	“A specter is haunting Europe — the specter of communism. All the powers of old Europe have entered into a holy alliance to exorcise this specter: Pope

	ghosts.	and Tsar, Metternich and Guizot, French Radicals and German police-spies.”
3. Herbert Spencer (1820–1903)	Spirit of Social Darwinism, survival of the fittest, a version of ‘trickle-down.’ If poor are poor and rich are rich, its just the workings of natural selection.	Again, specter of state intervention in free market forces haunts the survival of fittest
4. John Dewey (1859-1952)	Dewey conjures a “will to cooperate” “spirit,” that is “an equal right to share in the cultural and material fruits of collective human invention, industry, skill and knowledge” ... “It is to this great work that any ideal worthy of the name of education summons the educational forces of all countries” (Dewey (1934/2004: 244-5).	The other specter: “offset to the spirit of inhumanity bred by economic competition and exploration” and “unprecedented wave of nationalistic sentiment, of racial and national prejudice, of readiness to resort to force of arms. For this spirit to have arisen on such a scale the schools much have somehow veiled grievously”
5. Max Weber (1864-1920)	Weber says Protestant Ethic is most efficacious spirit of capitalism	The specters of Catholic ethic haunts Protestant spirit of capitalism
6. John Maynard Keynes (1883–1946)	Keynes wrote about necessary ‘animal spirits’ of entrepreneurs who act non-rationally & brutally	The specter of State capitalism haunts and contains the avarice of the ‘animal spirits.’
7. Germán Bernácer (1883-1965)	Bernácer (a contemporary of Keynes) favored a state socialism (normalizing policies, standard-setting that regulates instrumentalist greed, and wrote of Society and Happiness.	The specter of speculation markets haunts the spirit of capitalism, and its instrumentalist ethics

Next, I begin deconstructing restorying in order to resituate its questions and conversation in posthumanist new critical materialisms.

### **PART III: DECONSTRUCTING RESTORYING**

My purpose is to refine the restorying interventions, and to improve the quality of PTSD services offered to veterans and their families.

White and Epston (1990) do have one of the better treatments for PTSD, for veteran and their family. What I propose is to give it an upgrade, so it works with critical new materialisms. A careful reading of their book reveals where it succumbed to constructivism, taking the linguistic turn, and the discourse turn, too far, so that the four kinds of material manifestations of PTSD go untreated. Restorying, I emphasize, is the most sophisticated work that has ever been done from a text framework, and stands an alternative to reliving the event, or memory, or the sensations. I am questioning the relation between event, memory, and symptoms in those clinical narratives which traces the flow of biographical time from past to present. The clinical narrative resumes the rhetorical devices at work in selective narrative attention, omitting LWMs related to exceptions of the narrative employment.

Translating the past into the present is one of the core features of restorying forms of PTSD psychotherapy (White & Epston, 1990), when the veteran realizes the clinical narrative of the event, and the military Warrior-narrative, self-deconstructs in the face of traces of Little Wow Moments (LWMs) of exception, that is basis of crafting a new story, and a new future.

**How is Foucault Restored in White and Epston?** In chapter 1, Michael White addresses 'Story, Knowledge, and Power' of Michel Foucault without any materialism. White summarized Foucault as follows: "Some have argued that power doesn't really exist, but that it is something constructed in language and that those who experience its effects have participated in 'brining it forth' The other position is that power really exists and is wielded by some in order to oppress others" (White & Epston, p. 1; White is author of this chapter).

The reduction by White of Foucault to constructivism, occurs when Gregory Bateson, is brought into establish the move from Newtonian physics ro 'living systems; (p. 2), followed by Edward Bruner to establish the 'text analogy' of 'narrative' (p. 2). Edward Bruner (1986a: 153) focus is on 'narrative structure' related concepts 'metaphor or paradigm" how "narrative emphasizes order and sequence" while "story" is "both linear and instantaneous" (as cited by White, 1990: 3). This gives legitimacy to White saying that in "family therapy" "the interpretive meted" proposes looking at "underlying structure or dysfunction the in family" in "how persons organize their lives around specific meanings" for "survival" and "career of "the problem" required by the family "system" (p. 2). White proposes 'externalization' treating the 'problem as the problem' and sidestepping "problem-saturated" accounts of their lives and relationships" (pp. 3-4). Questions and answers are constituted as a way of externalizing the problem as the problem, identifying unique outcomes (moments of exception to the problem narrative (p. 30-31). It is what for Foucault terms, "insurrection of the subjugated knowledges" (as cited in White, p. 32).



White (p. 6) centers in on Goffman's (1974) "interpretive frameworks" that families employ in "questions we ask about events, the realities we construct, and the 'real' effects experienced by those parties to the inquiry" (White, p. 5). White develops a table of six frameworks (positivist physical science (machine, mechanics, hydraulics), quasi-organism (biological), serious game (game theory), living room drama (dramaturgy), rite of passage (ritual, and the one they White and Epston base their praxis in, behavioral text (the performance of oppressive, dominant story or narrative knowledge). After playing with a couple of examples from the six frameworks, White settles for "the text analogy" framework (pp. 9-10). It is this text analogy of readers, writers, and interpreters of texts that substitutes for "lived experience" (p. 9). From there it is a matter of reducing it to Gergen and Gergen's (1984\_ 'self-narrative', the lineal sequence of stories with "beginning (or a history), a middle (or a present), and an ending (or a future), then the interpretation of current events ..." (drawn from Bruner, 1986a) (White, p. 10). The Beginning, Middle, End Narrative (BME Narrative) becomes the frame of the text of life experience, also called 'dominant story' (Bruner, 1986a: 143). The structuring of BME narrative is a "selective process" to "prune" experience, to select events that fit (White, p. 11). The restorying therapy is fitted with Goffman's (1961) "unique outcomes" to generate exceptions to dominant BME narratives (or dominant stories) their plots so that "re-authoring" of their lives and relationships can occur to produce a "new story" that can be supported by an external audience (as cited p. 15-17).

The restorying process, moving from diagnosing dominant BME narrative plots, their exclusions of 'unique outcomes, that can be gathered to construct 'new story' is summarized as narrative means to therapeutic ends, a pragmatic way of reframing the text analogy. White mentions Marxist class ways of framing "traumatic personal experiences" and "gender-specific repressive" ways of power, then returns to Michel Foucault's contribution to the "analysis of power", the "constitutive effects of power, and being "subject to power through normalizing 'truths" citing Foucault (1970, 1980, 1984a) (see White, p. 19). Power/knowledge is reduced to normalizing discourse, to text analogy, but the 'vehicles of power,' the materialisms, including the technologies of power, the discourse<---->material from Foucault all is left out, except the mention of "manuals" that "provided meticulous instruction not he correct methods for the supervision of childhood sexuality" (p. 21).

From the critical new materialisms, not only is power/knowledge inseparable, discourse/material is inseparable in the material practices and discursive aspects of PTSD. The micro-power/knowledge and the macro-power/knowledge are material-discursive manifestations in the operation of military, political, medical, academic PTSD. There are historical effects of material/discursive practices. This includes what White (p. 24) meant ions in passing as "the growth of unitary and global knowledges from the 17th century on, as well as for the rise of capitalism" and the social and material control of PTSD, its

long history, as a technology of exclusion, subjugation, of "docile bodies" as Foucault calls them, in the ever-present "gaze" of PTSD, including the instruments of observing and treating PTSD (ibid, p. 24). PTSD certainly is an "ideological construct" in the "apparatuses of control: a "subtle mechanism" (Foucault, 1980: 102, as cited in White, p. 25) that is as well, and simultaneously, a web of material practices, and a site of conflict and struggle, as Foucault (1980L 84) says is "linked to the institution and functioning of an organized scientific discourse within society such as ours" (as cited in White, p. 27).

Here White does the final reduction "As this storying of experience is dependent upon language, in accepting this premise we are also proposing that we ascribe meaning to our experience and institute our lives and relationships through language" (p. 27). The linguistic turn, all summed up in the storying and restorying of experience, the effects of language of power and language exercising power.

***Materiality of Writing*** - At the same time, what is ironic, is the restorying praxis, is all about material practices. For example, letter writing between therapist and family members, and family members to one another is a requisite practice of restorying, done in sessions or as homework, and communication in between sessions. It is the act of writing that transforms restorying from the alternative therapy practices of talk therapy. Writing introduces coherence, and exposition, in the written tradition to therapy (p. 35).

Next, I take this to a posthumanist level.

#### **PART IV: POSTHUMANIST, QUANTUM RESTORYING WITH CRITICAL NEW MATERIALISMS OF POST-TRAUMATIC STRESS DISORDER (PTSD)**

To summarize, I will discuss five ways to combine material *with* discursive in quantum restorying:

- 1) PTSD inhabits living bodies in material ways (biochemical, psychio-biologic, psychic-memory-neurology).**
- 2) PTSD is embodied in the military and other institutions (family, academic, clinical therapy), in the relation of bodies with and without PTSD.**
- 3) PTSD is embodied in the habit and practices of military industrial complex, and formations of late modern capitalism.**
- 4) PTSD is materialized in 'observing instruments' and 'observing apparatuses as well as in treatment protocols.**
- 5) PTSD embodies the human spirit that haunts veterans, families, the military, social sciences of diagnosis (instrument production & measurement), and clinical treatments.**

The posthumanist storytelling dynamics of this interplay of scientific, academic, and institutional materialisms *with* institutional narratives and veteran's

own living stories creates a self-organizing dynamic, an *agentialist realist* aspect of ongoing intra-activity that has material consequences on/in bodies of veterans of combat, and their families, their bodies.

I call this new approach *Quantum Restorying*. I root it in the work of critical new materialists (Barad, 2003, 2007, 2010, 2011, 2013; Coole & Frost, 2010; Haynes, 2010; Jackson and Mazzei, 2012). These are all feminist critical materialist scholars. The field of writers expands to include Jane Bennett, Donna Haraway, Deborah Cook, Karen Barad, to name a few of the posthumanist writers. Posthumanist critical new materialist scholars work with a set of ontology writing from Deleuze, Heidegger, Arendt, Merleau-Ponty, and re-establish Marx, Althusser, Adorno (in critiques of late modern capitalism, consumerist materialism, bioethics, etc.; see Cook, 2006; Adorno & Horkheimer, 1955), and with poststructuralist work of Derrida, Foucault, Butler, and Spivak, among others. In those works material<---->discursive and discursive<---->material are balanced differently, in ways that can inform a Quantum Restorying paradigm. I call into question the efficacy of reliving the trauma as an effective treatment for combat trauma, rape, physical and mental abuse, and other survivors.

We (Boje, Rosile, Hacker, England Kennedy, & Flora, 2013) propose to combine quantitative and qualitative methods in a comparative evaluation of two skill-training approaches (restorying and equine groundwork). Both are retheorized and re-methoded as posthumanist quantum restorying. We believe it is important to treat both the veteran with PTSD and the family in posthumanist quantum restorying ways.

We will study them in combination to assess the relative and combined efficacy in PTSD, both treating the family unit, and the mattering/materialization of PTSD. However the efficacy of our own, and other approaches depend upon the discursive/material influence of many different institutional narratives and observational apparatuses of PTSD.

We propose posthumanist quantum restorying, a skills training provided by 'ontological restorying coach' to a veteran and their family. We do not delve into the trauma memory or relive the trauma event. Rather, the quantum restorying helps the family system materially and discursively fend off instruments of PTSD apparatus, and institutional narratives of 'what is trauma' and 'its career' (stages, outcomes) in order to develop 'living story' alternatives. Equine skills training for the veteran and their family allow nonverbal ways of persons relating to horses. This is also posthumanist quantum storytelling. The horse and human in a discursive-materiality relationship, body-to-body, affecting changes in materiality of PTSD, and its pre-storable mattering.

My colleagues and I propose to do interviews about the government involvement in asserting PTSD, or denying PTSD claims. Each political party is responsible for undertaking changes in PTSD benefit qualifications, the types of

treatments available, the very stigma of PTSD itself in the military, in society. Our interviews ask respondents about the history of how the government, the military, various clinical approaches, indigenous healers identified and treated, or refused to treat PTSD. The careful preparation of PTSD instruments, laboratory with extensive sensory equipment to simulate trauma event cues. An important contribution is the interdisciplinary approach in identify narrative idioms of stressors, and of PTSD.

Here I want to compare restorying and quantum restorying. Both are, in my opinion, more effective than repeated exposure of the veteran to the trauma narrative, ether in virtual reality of having the veteran themselves or the therapist repeat it over 4 to 30 week period, reinforces the trauma.

Quantum Restorying (Boje, in press) is therefore defined here as the dynamic interplay of agential cuts, the joining and disjoining, and inseparability, by which everyday and dramatic trauma experience, as yet unstoryable is framed, produced, constructed, and socially processed into the 'master narratives' of the institutions of military, media's popular culture, and in the academic publishing and clinic's treatment economies while the veteran either adopts these imposed narratives, leaves combat unstoryable, or enacts some living stories, ac/counting of ac/counts coming at them from a myriad of institutions with differing agendas. Quantum Storytelling is a dynamic relationship between institutional 'dominant narratives' agential cuts and the veteran's own 'living stories' (more agential cuts) of the career of trauma itself, and the many ways of making sense of it.

The cutting edge of quantum restorying calls social constructionist ways of narrative into account, for taking the linguistic turn too far, and omitting 'mattering' itself, all the kinds of materiality that go beyond the Newtonian, the Cartesian split.

The memories and experience may also be as yet unstoryable by the veteran. When veterans are asked to talk about trauma experiences they frequently find it unstoryable and unnarratable (Boje, in press).

The tie in to critical new materialisms is in the first two chapters of White and Epston (1990). Several works by Michel Foucault are summarized, but without the emphasis of Foucault's work in the critical new materialisms. The result is Foucault from his power/knowledge, through discipline and punish, and the technology of the body --- gets reduced to a discursive approach to storytelling for family systems. The critical new materialisms, by contrast, are about the mutual relationship of material<---->discursive. Actually, for Foucault the discursive<---->material is his priority.

The path of growth of PTSD is discursive-material and material-discursive. First, PTSD inhabits the living body in material ways (biochemical, physico-biologic, psychic-memory-neurology), Second, PTSD is embodied in the military institution, in the relations of bodies with and without PTSD, and in the

family body in relations of bodies with PTSD and the stress of living with bodies with PTSD. Third, PTSD is embodied in the conduct and habits, the practices of the military industrial complex, the formations of late modern capitalism. Fourth, PTSD is materialized in a set of 'observing instruments' and in 'PTSD observing apparatuses' and in many different 'PTSD protocols' of diagnosis, treatment, and so forth. Finally, PTSD embodies the human spirit, haunts the veteran, the family, the military, the academic sciences of diagnosis, treatment, etc. The PTSD hauntology of human spirit, the specter of PTSD, the signs and signals of PTSD is part of Derrida's work (*Specters of Marx*, 1994).

Obviously PTSD is a social discursive, an institutional discourse, a scientific discursive, and at the same time in materializes in material practices of institutions of many sorts.

Our study (Boje, Rosile, et al., 2013) compares two alternatives to VRE and NET: Restorying Skill Training (RST) and Equine Skill Training (EST).

**RST:** Restorying Skill Training (RST) has been used worldwide with excellent results since White and Epston's (1990) work was published. **Restorying** is an approach that can help veteran's overcome a dominant trauma narrative by creating a new story that becomes supportable by veteran's family and their wider circle of relationships (White & Epston, 1990; Rosile & Boje, 2002; Boje, in press, p. 193). However, in the case of reenactment looping, the events have not become storyable into experiences or memory. What restorying does is elicit 'unique outcomes' of organizational experience, successful, moments, 'little wow moments' (LWMs) of personal living story exceptions, when the person had some personal agency. Out of the un-narrated experience, these unique outcomes of past success, and anticipated future efficacy are reformulated into a 'new story' to displace the habituated dominant narrative.

Rosile and Boje (2002) have developed restorying into eight steps, and Boje (in press; pp. 198-199) used it work with a veteran, 'Mr. Military' in a conference demonstration of restorying:

1. **Recharacterize (authentic identity)** – Describe you and your family at its best, functioning perfectly, living up to your ideals? What are your most outstanding qualities as a person? ... as a family? Answer: "I get things done, I charge ahead, take the lead, etc."
2. **Externalize (re-label)** – Make the problem the problem, not the people. E.g. 'Mr. Military' is the problem, a mask one puts on, a role one plays in the military: go-getter, task driver, get job done whatever it costs for others, etc.
3. **Sympathize (benefits)** – What are the benefits of 'Mr. Military'? Whom does this benefit you? ... your family? ... your career?

4. **Revise (consequences)** – What are the negative consequences of 'Mr. Military'? Would you really like to be rid of Mr. Military? ... rid of the problem?
5. **Strategize (Little Wow Moments)** – LWMs are unique outcomes (Goffman, 1959) when the problem was not as strong or you overcame it, resisted, and were an exception to the BME narrative plot (had potentiality). LWMs emerge in the unstoryable.
6. **Restory (rehistoricizes the BME narrative)** – Assemble several LWMs into a new living storyable that becomes the rule, no longer the exception. E.G. The veteran said he wanted to put away Mr. Military and develop a different loving way of being with his family and pursuing his doctorate. Write a news release and send a letter to someone you think has this skill. This takes living storyable to a helpful general narrative, a common ground for family and colleagues.
7. **Publicize (support networking)** – Who in your life can already see the new living story, the new loving character, your possibilities, and your new future? Again the living storyable becomes a general narrative, a common ground. Who can you enlist to support you, and tell you when 'Mr. Military' returns to the stage? A support group of doctoral student cohorts was formed on the spot. They were happy to play the support role.

We propose to enact two steps in each session with three veterans and their families (meeting separately in sessions 1 to 3; together in session 4). This method is called 'pulsing,' the pulsing in of the steps, over the course of the four sessions, for the three families in the treatment condition.

Next, I will reimagine restorying using critical new materialisms into 'quantum restorying.'

**Table 1: Différance Questions in Old and Quantum Restorying Praxis**

<b>STEPS</b>	<b>OLD RESTROYING</b>	<b>QUANTUM RESTORYING</b>
<b>1. Recharacterize (authentic identity)</b>	Q1: Describe you and your family at its best, functioning perfectly, living up to your ideals? Q2: What are your most outstanding qualities as a person? ... as a family?	Q1: How does PTSD inhabit the living bodies of you, your family relations, in material ways (biochemical, phsicio-biologic, psychic-memory-neurology)? Q2: How is PTSD materialized in 'observing instruments' and 'observing apparatuses as well as in treatment protocols?
<b>2. Externalize (re-label)</b>	Q3: Make the problem the problem. Q4: Give it its own name and identity separate from the person	Q3: How is the Military, Medical establishment materializing PTSD? Q4: How is PTSD is embodied in the military and other institutions (family, academic, clinical therapy), in the relation of bodies with and without PTSD?
<b>3. Sympathize (benefits)</b>	Q5: What are the benefits of 'Mr. Military'? Q6: Whom does this benefit you? ... your family? ... your career?	Q5: How do the military, medical, and university benefit from PTSD? Q6: What are the benefits of PTSD materialized in 'observing instruments,' 'observing apparatuses, and 'treatment protocols'?
<b>4. Revise (consequences)</b>	Q7: What are the negative consequences of 'Mr. Military'? Q8: Would you really like to be rid of Mr. Military? ... rid of the problem?	Q7: What are the consequences of PTSD being embodied in the habit and practices of military industrial complex? Q8: What are the consequences of PTSD being embodied in the economics and politics of modern capitalism?
<b>5. Strategize (Little Wow Moments of exception)</b>	Q9: What LWMs (unique outcomes) when problem not as strong or you overcame it, resisted it? Q10: When were you an exception to the plot of Mr. Military?	Q9: What are the LWMs when PTSD did not match the institutional diagnosis? Q10: When were you an exception to the military's plot about PTSD?
<b>6. Restory</b>	Q11: How can you	Q11: How can you reassemble

<b>(rehistoricizes the BME narrative)</b>	assemble several LWMs into a living story that becomes the rule, no longer an exception? Q12: Write a news release (or letter) to someone you think has this skill?	the materiality of PTSD, its production in the Military, Medicine, Family, and University? Q12: How can you restory PTSD as a specter that haunts the veteran?
<b>7. Publicize (support networking)</b>	Q13: Who in your life can already see the new living story, the new loving character, your possibilities, and your new future? Q14: Who can you enlist to support you, and tell you when 'Mr. Military' returns to the stage?	Writing is a materiality process: Q13: What letter writing between therapist and you? Q14: What letter writing between you and family members?

Rosile and Boje (2002) have also extended restorying to 'organizational storytelling.' Organization storytelling is very 'problem-saturated' interpretations of the experience that becomes a 'dominant narrative' mapping with a linear (antenarrative) sequence of a few events forged into a beginning, middle, and end deterministic coherence.

I believe the question and answer, and the letter writing can be adapted from White and Epston (1990). What is different about 'quantum restorying' is the standpoint is posthumanist, and material and the discursive aspects of PTSD are explored together, in their inseparability.

**PART VI: MICROANALYSIS OF EMBODIED EVENTS OF QUANTUM RESTORYING AND EQUINE GROUNDWORK**

The interpretive units are the hundreds of micro-events, rather than just the aggregate of the six veterans returning from combat zones and their families. There is good reason to suggest this will produce outcomes.

First, following Monson and Friedman (2006: 8) " recommendations about broadening the range of trauma symptoms to consider, interpersonal functioning, social support, affective regulation, and self-efficacy might be considered. Biological markers may even be useful to consider in the future, as the psychobiological findings become more." This accomplishes important validity criteria that Farnsworth and Sewell (2010) recommend:



1. Theoretical fidelity, - Narrative restorying and equine skill development we are field testing, avoids explicit focus on the “traumatic nucleus” in Immersion Therapies, on the assumption that such a focus might inadvertently facilitate the consolidation of that nucleus and actually increase the possibility of PTSD. We will be able to interview clients to assess how much Immersion Therapy that have had. Our filming of the sessions can fill in gaps in pervious work using restorying to repair narratives broken by trauma (Sewell & Williams, 2002).
2. Applicability – We have applicability to the kinds of trauma treatments that are used in the Military programs, but have not been evaluated beyond the single case study (Palgi & Ben-Erza, 2010).
3. Potential for empirical investigation – We are sorting out what variables can be investigated using surveys in the future. We are using multiple case study comparison to do theory building. This is recommended by Kathleen Eisenhardt (1991). The process is to work with clients in two case contexts, the restorying discursive event, and the equine events in an arena. This permits filmed events to be contrasted and compared between the two case settings.

Second, Palgi and Ben-Ezra (2010) report on the procedures for using narrative restorying treatment with a single case. We overcome the single case problem (Yin, 2001) by looking at six cases. We are expanding that to six cases, while adding the dimensions of social support, affective regulation, and self-efficacy.

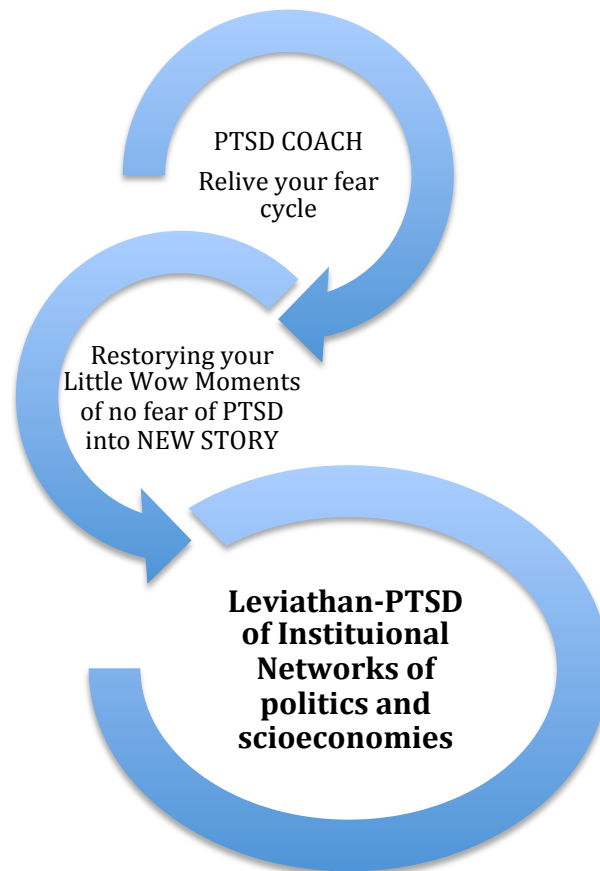
Third, by filming the sessions, we will be able to trace how, when, and at what points in the processes, there is discernible changes in the behavior and discursive patterns. For example, when does the horse react more positively to the client? At what point does the self-efficacy discourse change?

Our approach broadens the range of treatment by working with social support (family), self-efficacy (restorying), and affective regulation (with equine experiences). We are using film interaction events. We expect that there will be thirty to fifty key events per client (and more within each family unit). The film frames will be analyzed by multiple raters, and that will yield inter-rater reliability scores. The unit of analysis is not just the six veterans, it is the event units where we expect changes could occur. There would be 180 to 300 such event units to code and assess reliability scores. We will be able to break down the units by those focused on destroying and those involving equine skills. We can do comparisons between early event units (at the start of the program) and those later in the sessions.

## **DISCUSSION AND CONCLUSIONS**

Conventional conception, institutional Cartesian cuts, institutional observing apparatuses, and dominant treatment modalities miss the role of Leviathan in

producing and sustaining PTSD. If we can help veterans map the wider causal field of PTSD, then Leviathan, its traces, its specter is no long an absent referent.



**Figure2: Identifying the Absent Referent of Leviathan-PTSD, its Downward Spiral**

Posthumanist quantum restorying can have three impacts:

The first major impact is that we can return to the military and other funding sources, showing the result of the pilot study. Rather than just classify as person as with or without PTSD, we will analyze the micro-events for the rhythm of hundreds of event per hours. If we establish even more accurate coding of the film segments, there can literally be hundreds of events per minute, that horse and human are reading and reacting to establish their relation body rhythms. Replaying the film, doing multi-rater coding has not been done before in equine skills training sessions.

Second, in analysis of micro-events of the quantum restorying sessions, we plan to focus on different restorying steps in each of the three sessions with the veterans, three sessions with just the family, and a combined fourth session with both veteran and their families. Cameras focused on individual participants will

register body reactions to rhythms of speech and body language of the participants, and the facilitator.

Third, in the military the body of the soldier belongs to the military. In the military, there is a dominant narrative, an ideology of what is PTSD, and how, mostly a veteran such just 'man-up' or 'toughen-up' because stress is just part of combat zone, so 'get over it.' Requests for therapy are often met with a prejudice a stereotypic response, 'Are you sure? That request will be the end of your career. An impact of our research is to begin to change the military's grand narrative about treating PTSD, which is 'don't report it. Deal with it on your own.' When there is treatment, the most used military method is immersion therapy (repeated immersion into the details, the felling states of the trauma, in order to desensitize). You can see how desensitizing fits the ideology of the military's dominant narrative of PTSD, 'suck it up!' Therefore, a major impact of the study is to show the efficacy of two approaches (equine only) and (equine with skills training). This does two things: 1) It gives the military two alternatives to immersion only therapy. 2) Both interventions we are analyzing are about skills training, and do not carry the stigma of 'therapy,' 'psychology,' or 'psychoanalysis.'

## REFERENCES

- Adorno, Theodor; Max Horkheimer, Max. 1955/1997. *Dialectic of Enlightenment*. Verso.
- Akerlof, George A., and Robert J. Shiller. (2010). *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism (New in Paper)*. Princeton University Press.
- Andrews, Gavin, T. I. M. Slade, and Cathy Issakidis. (2002). "Deconstructing current comorbidity: data from the Australian National Survey of Mental Health and Well-being." *The British Journal of Psychiatry* 181.4: 306-314.
- Barad, Karen. (2003). "Posthumanist performativity: Toward an understanding of how matter comes to matter." *Signs*, vol. 28.3: 801-831. <http://uspace.shef.ac.uk/servlet/JiveServlet/previewBody/66890-102-1-128601/signsbarad.pdf>
- Barad, Karen (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, Duke University Press.
- Barad, Karen. (2010). "Quantum entanglements and hauntological relations of inheritance: Dis/continuities, spacetime enfoldings, and justice-to-come." *Derrida Today* 3.2: 240-268.

- <http://humweb.ucsc.edu/feministstudies/faculty/barad/barad-derrida-today.pdf>
- Barad, Karen. (2011). "Nature's queer performativity." *Qui Parle: Critical Humanities and Social Sciences* 19.2: 121-158.  
[http://root.ps/download/tecnomagxs/Barad\\_natures\\_queer\\_performativity.pdf](http://root.ps/download/tecnomagxs/Barad_natures_queer_performativity.pdf)
- Beckham, Jean C., Michelle E. Feldman, and Angela C. Kirby. (1998). "Atrocities exposure in Vietnam combat veterans with chronic posttraumatic stress disorder: Relationship to combat exposure, symptom severity, guilt, and interpersonal violence." *Journal of traumatic stress* 11.4: 777-785.
- Berg, A. O.; Breslau, N.; Goodman, S. N. et al. (2008). Treatment of posttraumatic stress disorder, an assessment of the evidence. Committee on treatment of post traumatic stress disorder. Board on Population Health and Public Health Practices, Institute of the National Academies, Washington D.C.: That National Academies Press. [http://www.pdhealth.mil/downloads/TreatmentofPosttraumaticStressDisorder\(IOM2007\).pdf](http://www.pdhealth.mil/downloads/TreatmentofPosttraumaticStressDisorder(IOM2007).pdf)
- Blanchard, E. B., Jones Alexander, J., Buckley, T. C., & Forneris, C. A. (1996). Psychometric properties of the PTSD Checklist (PCL). *Behaviour Research and Therapy*, 34, 669-673.
- Boje, D. M. (In press). ***Storytelling Organizational Practices: Managing in the Quantum Age***. London: Routledge.
- Boje, D. M. and Henderson, T. (Eds.) (In press). ***Being Quantum: Ontological Storytelling in the Age of Antenarrative***. UK: Cambridge Scholars Press.
- Boje, D. M.; Rosile, G. A.; Hacker, K. L.; England Kennedy, E. S.; Flora, J. (2013). Combining restorying and equine-assisted skills training in counselor communication designed to help soldiers and their families recover from traumatic stress. Interdisciplinary grant approved for funding by NMSU Office for Research, Dec 9<sup>th</sup>.
- Bowser, Betty Ann. (2010). 'New PTSD Treatment Rules for Vets Come Too Late for Some.' *Health* (July 12) on line.  
<http://www.pbs.org/newshour/rundown/2010/07/new-ptsd-treatment-rules-for-vets-come-too-late-for-some.html>
- Bracken, Patrick. (1998). 'Hidden agendas: deconstructing post-traumatic stress disorder.' Pp. 38-59 in *Rethinking the Trauma of War*, ed. Patrick J. Bracken and Celia Petty (London: Free Association Books).

- Buehlman, K., Gottman, J.M., & Katz, L.F. (1992). How a couple views their past predicts their future: Predicting divorce from an oral history interview. *Journal of Family Psychology, 5*, 295-318.
- Carroll, E. M., Rueger, D. B., Foy, D. W., & Donahoe, C. P. (1985). Vietnam combat Veterans with posttraumatic stress disorder: Analysis of marital and cohabitating adjustment. *Journal of Abnormal Psychology, 94*, 329-337.
- Collie, Kate; Backos, Amy; Malchiodi, Cathy; Spiegel, David. (2006). "Art therapy for combat-related PTSD: Recommendations for research and practice." *Art Therapy, vol. 23.4*: 157-164.
- Cook, Deborah. 2006. "Adorno's critical materialism." *Philosophy & social criticism* 32.6: 719-737.
- Coole, Diana. (2010). "The inertia of matter and the generativity of flesh." Pp. 92-115 in Diana Coole and Samantha Frost (Eds.) *New materialisms: Ontology, agency, and politics*. Duke University Press.
- Coole, Diana; Frost, Samantha (Eds.). 2010. *New materialisms: Ontology, agency, and politics*. Duke University Press.
- De Jong, Joop. (2005). "Commentary: Deconstructing critiques on the internationalization of PTSD." *Culture, medicine and psychiatry* 29.3 (2005): 361-370.
- Derrida, Jacques. (1994). *Specters of Marx: The State of the Debt, the Work of Mourning, & the New International*, trans. by Peggy Kamuf. NY: Routledge.
- Edkins, Jenny (ed.), (2003). *Trauma and the Memory of Politics*. Cambridge, UK: Cambridge University Press.
- Eisenhardt, Kathleen M. (1991). "Better stories and better constructs: the case for rigor and comparative logic." *Academy of Management review* 16.3: 620-627.
- Elbogen, E.B., Johnson, S.C., Newton, V.A., Straits-Troster, K., Vasterling, J.J., Wagner, H.R., & Beckham, J.C., (2012). Criminal justice involvement, trauma, and negative affect in Iraq and Afghanistan War era veterans. *Journal of Counseling and Clinical Psychology, 80*(6):1097-1102.
- Frost, Samantha. (2010). Fear and the illusion of autonomy. Pp. 158-176 in Diana Coole and Samantha Frost (Eds.) *New materialisms: Ontology, agency, and politics*. Duke University Press.

- Greenwald, Bruce C., and Joseph E. Stiglitz. (1988). "Keynesian, new Keynesian, and new classical economics." *Oxford Economic Papers* Vol 39: 119-132.
- Farnsworth, Jacob, and Kenneth W. Sewell. (2010). "' Back to the Future" Therapy: Its Present Relevance, Promise, and Implications." *Pragmatic Case Studies in Psychotherapy* 6.1: 27-33. <http://reaper64.scc-net.rutgers.edu/journals/index.php/pcsp/article/viewFile/1013/2409>
- Foa, E., Hembree, E., & Rothbaum, B. O. (2007). *Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences therapist guide*. Oxford University Press, USA.
- Folchman, Ruth. (2004). *Deconstructing PTSD: Constructing a Sociopolitical Response to Violence Against Women*. Dissertation.
- Gross, Michelle M., and Sandra A. Graham-Bermann. (2006). "Review Essay: Gender, Categories, and Science-as-Usual A Critical Reading of Gender and PTSD." *Violence Against Women* 12.4: 393-406.
- Hawkins, E.J., Grossbard, J., Benbow, J., Nacev, V. & Kivlahan, D.R. (2012). Evidence-based screening, diagnosis, and treatment of substance use disorders among veterans and military service personnel. *Military Medicine*, 177(8): 29-38.
- Haynes, Patrice. 2012. *Immanent Transcendence: Reconfiguring Materialism in Continental Philosophy*. Continuum International Publishing Group.
- Hendrick, S.S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, 50, 93-98.
- Hoge, C. W.; Auchterlonie, J. L.; Milliken, C. S. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Journal of the American Medical Association*. Vol. 295 (9): 1023-1032.
- Hoge CW, Terhakopian A, Castro CA, et al. (2007). Association of posttraumatic stress disorder with somatic symptoms, health care visits, and absenteeism among Iraq war veterans. *American Journal of Psychiatry*, Vol. 164:150-3.
- Hoge CW, Castro CA, Messer SC, et al. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, Vol. 351: 13-22.
- Kerig, Patricia K. (2011). "Trauma and PTSD among youth involved with the juvenile justice system." *Traumatic StressPoints* 25 (2011): 5-6.
- Kerig, Patricia K., et al. (2012). "Deconstructing PTSD: Traumatic experiences, posttraumatic symptom clusters, and mental health problems among

- delinquent youth." *Journal of Child & Adolescent Trauma* 5.2 (2012): 129-144.
- Jackson, Alecia Youngblood; Mazzei, Lisa A. (2012). *Thinking with theory in qualitative research: Viewing data across multiple perspectives*. London: Routledge.
- Jordan, B. K., Marmar, C. B., Fairbank, J. A., Schlenger, W. E., Kulka, R. A., Hough, R. L., et al. (1992). Problems in families of male Vietnam Veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 60, 916-926.
- Koenig Kellas, J. & Trees, A.R. (2006). Rating interactional sense-making in the process of joint storytelling. In V. Manusov (Ed.), *The sourcehood of nonverbal measures: Going beyond words* (pp. 281-294). Mahwah, NJ: Lawrence Erlbaum.
- Maier, Thomas. (2006). "Post-traumatic stress disorder revisited: deconstructing the A-criterion." *Medical hypotheses* 66.1 (2006): 103-106.
- Marx, Karl, and Friedrich Engels. (1848). "The communist manifesto." *Trans. AJP Taylor*. London: Penguin (1967).
- McLay, R. N.; Wood, D. P.; Webb-Murphy, J. A.; Spira, J. L.; Wiederhold, M.D.; Pyne, J.M. (2011). "A randomized, controlled trial of virtual reality-graded exposure therapy for post-traumatic stress disorder in active duty service members with combat-related post-traumatic stress disorder." *Cyberpsychology, Behavior, and Social Networking*, Vol. 14 (4): 223-229.
- Mead, George Herbert. (1932). *The philosophy of the present*. Vol. 3. Open court publishing co.
- Mikulincer, M., Florian, V., & Solomon, Z. (1995). Marital intimacy, family support, and secondary traumatization: A study of wives of Veterans with combat stress reaction. *Anxiety, Stress, and Coping*, 8, 203-213.
- Mitroff Ian I. (2002). Spirituality at work: The next major challenge in management. Pp. 35-44 in Thierry C. Pauchant (ed.) *Ethics and Spirituality oat Work" Hopes and Pitfalls of the Search for Meaning in Organizations*. Westport, Connecticut/London: Quorum Books
- Monson, Candice M., and Matthew J. Friedman (2006). "Back to the future of understanding trauma." *Cognitive-behavioral therapies for trauma*: 1-16. <http://savonaemergenza.it/userfiles/file/Guilford%20Press%20Cognitive-Behavioral%20Therapies%20for%20Trauma%202nd.pdf#page=16>

- National Center for PTSD,  
(2013). [http://www.ptsd.va.gov/professional/pages/partners\\_of\\_vets\\_research\\_findings.asp](http://www.ptsd.va.gov/professional/pages/partners_of_vets_research_findings.asp)
- National Council on Disability. (2009). Invisible Wounds: Serving service members and veterans with PTSD and TBI. Retrieved from <http://www.ncd.gov/publications/2009/March042009/>
- Neuner, F., M. Schauer, C. Klaschik, U. Karunakara, and T. Elbert. (2004). A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an african refugee settlement. *Journal of Consulting & Clinical Psychology* 72(4):579-87, Aug.
- Palgi, Yuval, and Menachem Ben-Ezra. (2010). "' Back to the Future": Narrative Treatment for Post-Traumatic, Acute Stress Disorder in the Case of Paramedic Mr. G." *Pragmatic Case Studies in Psychotherapy* 6.1 (2010): 1-26. <http://www2.scc.rutgers.edu/journals/index.php/pcsp/article/viewFile/1012/2406>
- Pineles, Suzanne L., et al. (2009). "Attentional biases in PTSD: More evidence for interference." *Behaviour research and therapy* 47.12 (2009): 1050-1057.
- Ruggiero, K. J., Del Ben, K., Scotti, J. R., & Rabalais, A. E. (2003). Psychometric Properties of the PTSD Checklist--Civilian Version. *Journal of Traumatic Stress, 16*, 495-502.
- Riggs, D. S., Byrne, C. A., Weathers, F. W., & Litz, B. T. (1998). The quality of the intimate relationships of male Vietnam Veterans: Problems associated with posttraumatic stress disorder. *Journal of Traumatic Stress, 11*, 87-101.
- Riviere, L.A., Merrill, J.C., Thomas, J.L., Wilk, J.E., & Bliese, P.D. (2012). 2003-2009 marital functioning trends among U.S. enlisted soldiers following combat deployments. *Military Medicine, 177*(10): 1169-77.
- Rosile, Grace Ann. (2007). Managing with Ahimsa and Horse Sense” A Convergence of Body, Mind, and Spirit. Pp. 175-180 in Jerry Biberman and Michael D. Whitty (Eds.) *At Work: Spirituality Matters*. Scranton/London: University of Scranton Press.
- Rosile, G. A.; Boje, D. M.; Carlon, D.; Downs, A.; Saylor, R. (2013). Storytelling Diamond: An Antenarrative Integration of the Six Facets of Storytelling in Organization Research Design. Accepted to appear in *Organizational Research Methods (ORM) Journal* on Feb 14 2013.



- Rosile, Grace Ann & David M. Boje. 2002. Restorying and postmodern organization theatre: Consultation in the storytelling organization. Chapter 15, pp. 271-290 in Ronald R. Sims (Ed.) *Changing the Way We Manage Change*. Westport, CONN/London: Quorum Books.
- Rothbaum, B. O. (2009). Using virtual reality to help our patients in the real world. *Depression and Anxiety*, Vol 26 (3): 209-211.
- Rumyantseva, G. M.; Stepanov, A.L. (2008). Post-traumatic stress disorder in different types of stress (clinical features and treatment). *Neuroscience and Behavioral Physiology*, Vol. 38 (1): 55-61.
- Schneiderman, A. I.; Braver, E. R., Kang, H. K. (2008). Understanding Sequelae of Injury Mechanisms and Mild Traumatic Brain Injury Incurred during the Conflicts in Iraq and Afghanistan: Persistent Postconcussive Symptoms and Posttraumatic Stress Disorder. *American Journal of Epidemiology*, Vol. 167, No. 12: 1446-1452.
- Sewell, K. W. & Williams, A. M. (2002). Broken narratives: Trauma, metaconstructive gaps, and the audience of psychotherapy. *Journal of Constructivist Psychology*, 15, 205-218.
- Smid, Geert E. "Deconstructing delayed posttraumatic stress disorder." Dissertation.
- Spiegel, David. (2001). "Deconstructing the dissociative disorders: For whom the Dell tolls." *Journal of Trauma & Dissociation* 2.1 (2001): 51-57.
- Stewart, P. (2013). Military suicides: One U.S., veteran dies every 65 minutes. Retrieved from [http://www.huffingtonpost.com/2013/02/01/military-suicides-us-veterans\\_n\\_2602602.html](http://www.huffingtonpost.com/2013/02/01/military-suicides-us-veterans_n_2602602.html)
- Smith, Adam. (1828/1863). *An Inquiry into the Nature and Causes of the Wealth of Nations*. A. and C. Black.
- Strand, Anete Mikkala Camille. (2012). *The Between: On dis/continuous intra-active becoming of/through an Apparatus of Material Storytelling*. Diss. Videnbasen for Aalborg UniversitetVBN, Aalborg UniversitetAalborg University, Det Humanistiske FakultetThe Faculty of Humanities, Forskningsgruppen i Bæredygtig LedelseForskningsgruppen i Bæredygtig Ledelse.
- Strand, Anete Camille. (in press). Materiality introduction in Boje, D. M. and Henderson, T. (Eds.) (In press). ***Being Quantum: Ontological Storytelling in the Age of Antenarrative***. UK: Cambridge Scholars Press.
- Teten, A.L., Schumacher, J.A., Taft, C.T., Stanley, M.A., Kent, T.A., Bailey, S.D., et al. (2010). Intimate partner aggression perpetrated and sustained by male

- Afghanisatan, Iraq, and Vietnam veterans with and without posttraumatic stress disorder, *Journal of Interpersonal Violence*, 25 (9): 1612-1630.
- Tsai, J., Maris, A.S., & Rosenheck, R.A. (2012). Do homeless veterans have the same needs and outcomes as non-veterans? *Military Medicine*, 177(1): 27-31.
- Turner, R.J. (1992). Measuring social support: Issues of concept and method. In H.O.F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 217-233). New York: Hemisphere Publishing.
- Veterans Intervention Project Report. (2009). Report of veterans arrested and booked into the Travis County Jail. Retrieved from <http://www.justiceforvets.org/sites/default/files/files/Texas%20Veterans%20Justice%20Research.pdf>
- VA (2013a). U.S. Department of Veterans Affairs. (August 10). 'DoD, VA Establish Two Multi-Institutional Consortia to Research PTSD and TBI.' <http://www1.va.gov/opa/pressrel/pressrelease.cfm?id=2473> and [http://www.whitehouse.gov/sites/default/files/uploads/nrap\\_fact\\_sheet\\_082013.pdf](http://www.whitehouse.gov/sites/default/files/uploads/nrap_fact_sheet_082013.pdf)
- VA (2013b). U.S. Department of Veterans Affairs. (June 24). VA Starts Campaign to Raise PTSD Awareness." <http://www1.va.gov/opa/pressrel/pressrelease.cfm?id=2455> [http://www.ptsd.va.gov/public/pages/fslist\\_mobile\\_apps.asp](http://www.ptsd.va.gov/public/pages/fslist_mobile_apps.asp) <https://itunes.apple.com/us/app/ptsd-coach/id430646302?mt=8>
- VA (2013c) U.S. Department of Veterans Affairs. (June 3). 'VA Hires Over 1600 Mental Health Professionals to Meet Goal, Expands Access to Care and Outreach Efforts, Directs Nationwide Community Mental Health Summits.' <http://www.va.gov/opa/pressrel/pressrelease.cfm?id=2450>
- VA (2010). U.S. Department of Veterans Affairs (July 12). 'VA Simplifies Access to Health Care and Benefits for Veterans with PTSD.' <http://www1.va.gov/opa/pressrel/pressrelease.cfm?id=1922>
- Weathers, F. W., Litz, B. T., Herman, D. S., Huska, J. A., & Keane, T. M. (1993). *The PTSD Checklist (PCL): Reliability, validity, and diagnostic utility*. Paper presented at the 9th Annual Conference of the ISTSS, San Antonio, TX.
- Weber, Max. (1905). *The Protestant Ethic and "The Spirit of Capitalism."* Translated by Stephen Kalberg (2002), Roxbury Publishing Company.
- White, Michael, and David Epston. *Narrative means to therapeutic ends*. WW Norton & Company, 1990.

White, M.D., Mulvey, P., Fox, A.m., & Choate, D. (2012). A hero's welcome? Exploring the prevalence and problems of military veterans in the arrestee population. *Justice Quarterly*, 29(2): 258-286.

Wigren, Jodie. (1994). "Narrative completion in the treatment of trauma." *Psychotherapy: Theory, research, practice, training* 31.3: 415.

Wood, D. P.; Wiederhold, B. K.' Spira, J. L. (2010). Lessons learned from 350 virtual-reality sessions with warriors diagnosed with combat-related posttraumatic stress disorder. *Cyber Psychology, Behavior, and Social Networking*, Vol 13 (1): 3-11.

Yin, Robert K. 2011. *Applications of case study research*. CA: Sage.