International Journal of Arts and Social Science **www.ijassjournal.com**
ISSN: 2581-7922
Volume 5 Issue 11, November 2022.

Warfare and the trauma cobweb: human suffering and the emergence of technical objects

Juliana Andrea Caicedo-Ramirez MD[1], Jesús David Charry-Sánchez MD[2], Jerónimo Andrade-Restrepo MD[3], María Helena Restrepo-Espinosa M.A. MsC PhD[1]

[1]*Public Health Research Group, School of Medicine and Health Sciences, Universidad del Rosario, Bogotá, Colombia*
[2]*Neuroscience Research Group NeURos, School of Medicine and Health Sciences, Universidad del Rosario, Bogotá, Colombia*
[3]*Inflamatory Bowel Disease Multidisciplinary Group, Internal Medicine Department, Hospital Universitario Fundación Santa Fe de Bogotá, Bogotá, Colombia*

ABSTRACT:*"Technical objects," such as War Neuroses (Shell shock, Hysteria and Neurasthenia) and Post Traumatic Stress Disorder, are considered emerging from historical and cultural practices within the medical field rather than just epistemological achievements. These objects were coiled by disciplines such as surgery, neurology, psychoanalysis, and psychiatry. They threaded a powerful cobweb within trauma and warfare during the nineteenth and twentieth centuries.*

Also, these objects emerged from clinical and experimental experiences oriented towards the understanding of human pain and social suffering derived from warfare. Nevertheless, often unable to go beyond the medical stance and its limits on behalf of understanding human pain and collective suffering. Interestingly, the discovery of memory and its bond with fear, shame, guilt, and trauma, wove threads of the cobweb. As expected, trauma achieved a central position within the web. Nonetheless, it encompasses multiple meanings, connections, and quarrels. Trauma is a unique signifier for a plurality of sufferings and illnesses.

The purpose of this review is to unveil the cobweb woven by trauma, unfolding its trajectories since its emergence during the First, Second, and Vietnam Wars. This, to embrace a further understanding of human pain and social suffering, and its core issues within the practice of medicine.

KEYWORDS-*Hysteria, Post Traumatic Stress Disorder, Shell shock, Trauma*

I. Introduction

"Technical Objects" derived from warfare and medicine such as War Neurosis (Shell Shock, Hysteria and Neurasthenia) and Post Traumatic Stress Disorder (PTSD) are considered historical and cultural productions rather than just epistemological developments of disciplinary medical scientific thought [1]–[4]. Pain and suffering due to warfare were acknowledged by physicians and "looped" to notions and paradigms of mental health. These relationships were not "natural" even though often such notions are considered to be so. Nevertheless, there were divergences, power struggles and even quarrels between physicians, which are generally not exposed [2]–[4]. The idea of looping effects within mental disorders is inspired in the works of Ian Hackings.

> Ian Hacking argues that mental disorders are humankind, differing from natural kinds insofar as they are subject to the looping effects of scientific classifications. The precise reason why mental disorders cannot be natural kinds is that being classified as having a mental disorder can bring on

changes in the self-concept and the behavior of individuals so classified. Such changes, in turn, can lead to revisions in the initial descriptions of mental disorders. Members of natural kinds, however, are not subject to such looping effects [5].

Likewise, War Neurosis, including Shell shock, Hysteria and Neurasthenia, were also artificially constructed, and intended to further understand pain and suffering from warfare during World Wars I and II. War Neurosis went through a number of plural disciplines, diverse meanings, multiple beliefs, and convictions within medical practices up to the present. However, the understanding of PTSD changed during the Vietnam War. This was considered by some authors a turning point in relation to the understanding of PTSD. Trauma turned to be a powerful unifier for diverse interpretations of this suffering from war, but also for a plurality of events and illnesses[1], [4].

These objects were looped in a way that gave rise to the idea of mental disorders as they are known today [2]–[4]. In this sense, the cobweb as a metaphor contains different layers, each with traces of time, contexts, and specific ways of arising. Nonetheless, Scientific knowledge is often presumed to develop through the natural evolution of thoughts and ideas which allows only a small surface of what is real to be visible.

Thus, to explore behind the upper surface, search through its layers, and look for the details of its emergence, implies to unfold the cobweb and make visible what is hidden, within these loops, from ordinary sight.

Taking this into account, the purpose of this review is to unveil the cobweb woven beyond trauma, unfolding its trajectories that have eventually led to the actual expansive uses since its emergence during the First, Second, and Vietnam Wars. This, in order to embrace a further and deeper understanding of human pain and social suffering, and its core issues within the practice of medicine.

II. The provenance of trauma

2.1 Origins

Physical and psychological suffering due to warfare were not always considered medical conditions, nor were they associated with pain or suffering. Before the nineteenth century, soldiers' inner strength was highly encouraged and considered bravery. The Bible condemned those who showed panic and fear on the battlefield [6]. Nevertheless, warfare nightmares are mentioned by Hippocrates (4607-377 B.C) and in Lucretius' poem, De Rerum Natura, written in 50 B.C [7]. Also, Icelandic and French Literature describe recurring nightmares after battle [8], not thought of as illnesses but rather an expression of human weakness. These and other effects were considered as honorable human responses to nationalism and loyalty. How and when courage and bravery were transformed into fear, shame, guilt, pain or suffering?

Physical suffering produced by warfare was described as a medical issue by army physicians during the French Revolutionary wars (1792-1800), and in Napoleonic wars as well (1800- 1815). The first syndrome labeled "vent du boulet (syndrome of the wind of the ball)", emerged during the Napoleonic wars[8], [9]. This suffering was described as a depressive pace in soldiers who experienced the wind of passage of a cannonball without any physical injury, some physicians agreed to call it nostalgia (homesickness). However, there is not a clear medical definition for this suffering to be considered a syndrome [9]. Furthermore, Crocq and Crocq[8]described fear as one of the causes of this homesickness regarding suffering due to warfare. Also, there was some mention about such suffering as not only being physical but also mental: "It is noteworthy that the symptoms are not caused by a physical wound, but by fright and the vision of a killed comrade, and that they persist over the years" [8].

Later, the invention of the railway gave advantages to the transportation system, but also caused serious accidents in laborers and these brought conditions that caught the attention of medical practitioners, specifically, from surgery and neurology[10]. During the 1860's numerous train accidents occurred, and this brought the attention of surgeons. Pain and Suffering were seen as effects of violent and unexpected events (surprise) and were considered assaults [4]. As a result, the attention on the assault supposedly explained by the arousal of emotions such as fear, pain and anger, interested physicians. The first to address the suffering that persisted beyond the resection of the physical injury was the surgeon John Eric Erichsen in 1866. He named the suffering "Railway spine", due to the shock provoked by the accident in the spinal cord[4], [8]. He observed micro-lesions and inflammatory processes of the spine or the brain and wondered of the cause for pain and suffering, to be in such physical conditions. Nevertheless, Suffering persisted beyond medical explanation after surgery and medical treatments had done their part. These facts led to the arousal of two different explanations, those oriented towards understanding the causes of the suffering as physical, and others as psychological.

This transition went from physical to psychological. Within the psychological currents of thought, mental suffering was considered as neurosis. The term neurosis emerged in 1776 and was defined as "functional derangement arising from disorders of the nervous system (not caused by a lesion or injury). Coined by the Scottish physician William Cullen (1710- 1790), derived from the Greek word neuron meaning "nerve" and from the modern Latin - osis, meaning "abnormal condition"[11].

Nevertheless, suffering was considered a central issue in these railway accidents, the suspicion about the search for compensation rights led to think of it as sinistrosis, by some physicians [1]. Even though there was a coincidence around the role played by recognized emotions such as fear caused by the threat or unexpected assault, it was thought that suffering was a consequence of the memory of the event rather than the event itself. Interestingly, physical wounds of a catastrophic accident or event were visible and treatable, but once the wounds were healed, pain and suffering stood; this gave rise to the suspicion that malingering was undoubtedly important. The central issue about true or false suffering brought into account major differences between those inclined for physical or psychological explanations. Nonetheless, while physical wounds were accepted as real because they were visible and somehow objective; psychological suffering was recognized but it was a challenge to prove, apprehend or understand. Some went only to accept physical and thus, lost interest in psychological suffering, while others persisted in the search; however, there was no clear horizon for the understanding of emotional suffering within the medical field [4].

2.1.1 *War Neuroses: Hysteria, Neurasthenia and Traumatic Neurosis*

Differences in the discussion around the question of suffering centered on the validity of psychological explanations. It was common for physicians to base their reasoning of suffering within physical or organic realities, even though these were recognized to have connections to mental and psychological effects. However, the dual condition of war and neurosis in this pervasive psychological and mental suffering, often beyond medical comprehension, was acknowledged by neurologists such as Jean Martin Charcot and his pupils, Pierre Janet, and Sigmund Freud. Charcot thought the "unexplained" suffering was due to heritage, an idea considered later by Freud. Heritage was not considered as genetic but rather an epigenetic cause in which personal history and family background were determinant for its emergence and responsible for illness or sickness [10]. The physical embodiment of psychological suffering was considered by these neurologists as "mental" and was supposed to be inclusive of psychological and physical conditions as well [4]. Nevertheless, within other medical disciplines mostly interested in understanding the physical causes for suffering, psychology was not recognized. Interestingly, this issue of accepting suffering derived from warfare as mental or psychological suffering, even today is scarce within some currents of thought, disciplines, and schools in the field of medicine.

Charcot placed his interest in mental processes and his thoughts viewed psychological suffering in relation to dissociation and repression. Derived from his findings, he proposed a diagnostic category named Hysteria. Referring to the Greek word "hystera," derived from the etymology of the feminine womb since most of his research was done with women who suffered psychological insanity. Originally, this psychological condition was defined as neurotic and thought to be caused by a dysfunction in the uterus. Because of this, it was thought that it affected only women. However, it was later experienced by some men; especially those who suffered due to railway accidents and warfare [10].

Several well-known neurologists searched for the explanation of the etiology of such puzzling suffering derived from railway accidents and war. What was more interesting was that pain stood but neither the physical cause nor the event was present. Charcot proposed a new notion for this suffering and named it as Neurasthenia, which referred to diseases affecting the nervous system but with unknown causes [10]. Needless to say, this accent of "unknown causes" referred to this suffering as psychological rather than physical. Nevertheless, this type of suffering was characterized by a set of features derived from extreme anxiety, the reason why it was also known as Anxiety Neurosis.

> The neurasthenia diagnosis originates in the writing of George Beard (1880,1881). As a war neurosis, it was believed to result from exposure to prolonged periods of intense mental and physical strain. Onset could be gradual or sudden, and the precipitating events were often the same as those said to cause shell shock. To be more exact, neurasthenia would develop in someone who had been exposed to a series of these events. The cumulative effect of the exposure would be to reduce his ability to withstand such events in the future. Once his threshold of resistance had dropped below the critical level, the next stressful event would precipitate the syndrome. As in shell shock and hysteria, the somatic medium for this process is neurological-" nerve exhaustion," according to Beard and the army doctors [4].

In 1884, Hermann Oppenheim, a German neurologist, described this psychological suffering as "traumatic neurosis". He referred to 42 cases of railway or accidents and found in all of them features of what he called emotional shock. However, his interest was oriented towards the discovery of a physical explanation for this type of suffering. The hypothesis that he offered as a cause for emotional suffering considered the hypothesis of molecular tissue changes and pathological-anatomical abnormalities as their etiology [12]. Furthermore, a Belgian psychiatrist, Jean Crocq, described 28 more cases of people who suffered railway accidents and supported this stance of pain due to physical causes as the trigger for emotional suffering [8].

Between 1890 to 1916, Oppenheim was criticized by some German's neuropsychiatrists, among them Max Lewandowsky and Hugo Liepmann, who put in doubt his hypothesis and stated that its cause was purely psychogenic. All of these were well known and recognized physicians who quarreled within the disciplines of neurology and psychiatry because of differences in their approaches. This gave birth to a controversy, mostly centered around the origin and cause of the symptoms recognized as emotional:

> The first one, the diathesis, supported by Charcot, is based on hereditary ground: the traumatic event appears only to reveal or update a pre-existing pathogenic potential. The second one, supported by Oppenheim, defends the idea that trauma is a specific pathology entirely caused by the accident [10].

Considering the idea that suffering, and pain were present even in the absence of the traumatic events, the role of memory was considered crucial in understanding the suffering that was endured beyond it. Regarding memory, War Neurosis emerged in the attempt to understand suffering derived from warfare. Memory was considered as a body and mind experience, reason for thinking of it as both, physical and psychological (mental suffering). Considering memory as an initial connecting device offered a possibility for the expansion of the cobweb's radii. This emerged around the search for understanding human suffering derived from warfare at the end of the eighteenth century. Later, traumatic memory connected human experience with a different comprehension of collective trauma. According to Young [4], traumatic memory comes together in two directions: medicalization of the past and normalization of pathology.

Medicalization of the past considers that traumatic neurosis is produced by the capacity to remember and to foster memories within the mind. Such memories are considered pathogenic secrets that only physicians can access because they include concealed ideas and urges. Traumatic memory is thought of as caused by traces of experiences and sensations related to events rather than events themselves. In this sense:

> The medicalizing process is captured in two biological images. There is the image of the traumatic memory as a kind of a parasite, an idea that recurs in the work of Ribot, Charcot, Janet, Freud, and the neo-Pavlovians. And there is the image of the traumatic memory as

> mimesis, a memory that is inscribed simultaneously in the mind, as interior images and words, and on the body, were it is disguised in perverse postures, sensations and absences (catalepsies, anaesthesia, etc.) [4].

On the other hand, normalization of pathology is considered an effect of Traumatic memory were:

> Pathology is denied its uniqueness and separateness and is now either a loss or displacement of normal functions, followed by the release of lower-level normal functions […], or an exaggeration or over extension of normal functions, resulting in a disequilibrium or depletion of functions and vital energies [4].

These two effects are recognized as ongoing consequences within the further attempts for understanding emotional suffering derived from warfare. Meanwhile, due to his close relationship with Charcot, Sigmund Freud became interested in Hysteria. In the first theoretical approach, Freud considered the etiology of this entity derived from early childhood traumas. Thus, the latent memory of traumatic events was responsible for the actual suffering and was established within the body and the psyche. Even though unconscious, actively operating within the sufferer is an internal conflict that compromised body and mind [4]. Freud believed that even without a physical wound or an organic condition, this emotional suffering due to internal conflicts was real, and caused by mental defensive processes such as memory, repression, suggestion or dissociation; oriented towards preserving the self. Meanwhile, neurologists searched for physical, organic or biochemical causes in order to support the reality of what was considered as mental suffering. Thus, a controversy within the neurology discipline and psychoanalysis related to explanations about the etiology of this physical and psychological suffering emerged, regarding its visibility or invisibility.

As a consequence, neurologists depleted their interest in this type of human suffering (including physical and psychological features) due to the impossibility to find visible causes and because of the "obscure" origins that could explain the effects of railway accidents, and later warfare. Also, due to the inability to establish specific connections within physical and psychological phenomena such as memory, repression, suggestion or dissociation. Nevertheless, the attention of Freud and other psychoanalysts, such as Ernst Simmel, Karl Abraham and Sandor Ferenczi, were oriented towards explaining mental suffering from a more essentialist view. In the Fifth Psychoanalytical Congress held in Budapest a symposium on War Neurosis was included. In this Conference:

> According to Freud, "official representatives from the highest quarters" of government were present and seemed favorably disposed toward creating centers to study" these puzzling disorders and the therapeutic effect exercised on them by psycho-analysis." Nothing came to this, however, since the war ended two months later and "interest in the war neuroses gave place to other concerns [4]

Nevertheless, Freud ascribed to heroic and patriotic ideals related to the duty to serve within the First World War and left his interest in War Neurosis. He distanced his ideology from that of Sandor Ferenczi, who was more benignant in relation to the accusatory posture related to the idea of malingering [1].

Concurrently, Rivers, an English army physician, and Charcot kept their interest in neurologic phenomena related to the functions of memory. This made it possible to sustain a new meaning to invisible psychological effects within traumatic suffering. As Young (1997) summarizes, the transitions that Freud encountered based on his interest in psychological processes, such as repression, dissociation, guilt, and shame, were oriented towards the defense of the self. These linked Hysteria and War Neurosis with self-caused traumatic suffering. Traumatic memory symbolized an attempt to explain posterior effects of painful experiences and events even though such events were no longer present. As a result, psychoanalysis thought of these processes as defense mechanisms related to self-caused suffering and due to pervasive feelings of guilt and shame. Since neurosis was viewed as a product of fright and conflict, these mechanisms were oriented towards the preservation of the "self" because of the presence of feelings of threat. Interestingly, the idea of self-caused, brought as an effect, increased previous doubts about truthfulness in those who suffered due to accidents or warfare. In conjunction with this doubt, suspicion emerged derived from the absence of organic or physical

proofs, as well as the unknown reason for such suffering. Also, expectations related to obtaining compensation, as a consequence of labor laws, brought back into the scene, the idea of malingering [1].

Important to remember that labor laws in railway accidents and later, human rights movements were essential social encounters. Likewise, it is remarkable to highlight the interest in emotional trauma held by psychoanalysts even beyond its objective proof, who, contrary to neurologists, some psychiatrists, and other army physicians, accepted it as real. Suspicion of truth and thus, needs for proof turned the focus on important controversies. The introduction of memory related to trauma was a breeding ground for divergent roads within the experience of emotional suffering. It encountered differences around determining the relationship between suffering, trauma, and memory with the exposure to painful or traumatic events. Derived from these differences two effects, as mentioned above, were stated: medicalization of the past and the normalization of pathology.

The normalization of pathology is strongly related to medicalization of the past within the realms of memory. It operated under the assumption of a natural connection between normal and pathogenic states at first. Later, it was thought of as an embodiment of pathology that brought as consequence physical lesions. Because of this, pathology became a normal reference for physiological and quasi physiological functions. In this sense, pathology embraces the idea of a natural course for morbidity. It is thought of as a transmutation resulting in disease or illness, often as a result of failures within the expected normal processes involved in higher levels of functioning, and as a result of a diminished capacity for adaptation. This mostly related to the idea of an existing physical lesion that has the effect of disturbing the natural course of morbidity. In this sense, the pathway of explanations for suffering derived from railway accidents and warfare. Similarly, experts went from pointing to physical nervous lesions (spine and neural) to the pathological role of emotions such as fear, pain and anger, to misfit psychological behaviors and suspicious moral acts. Later, it travels through the interest of therapeutic devices rather than understanding causes, towards the attention of psychic processes, such as suggestion, hypnosis, repression, dissociation, related to traumatic events [4]

The detours comprise a longtime journey to give traumatic memory an important place within the search for understanding emotional suffering derived from warfare, as a scientific, truthful, and valid explanation [1], [4].

> The traumatic memory emerges at the end of the nineteenth century, at the intersection of two evolving fields of medical knowledge: knowledge of how trauma affects the nervous system and, through it, the rest of the body, and knowledge of how pathogenic secrets impact on the mental life of their owners [4].

2.1.2The emergence of *Shell shock*

Added to the intricate discussion presented earlier, different views for understanding emotional trauma arose during the First World War. The pivot points around returning promptly to the battlefront was to lose as few soldiers as possible, despite some of them presenting common visible symptoms. Among the symptoms described were loss of smell, taste, difficulty speaking and seeing as well as difficulty standing up, uncontrolled vomiting, and memory loss without any physical wound. Additionally, the symptoms remained for longer periods of time than what was expected [13]. Because of this, army doctors faced the challenge of recognizing suffering due to psychological, emotional or mental affection compared to suffering derived from a physical wound [4]

In 1915, Dr. Charles Myers was the first one to describe what he called Shell Shock [13], [14] However, the idea of soldiers departing the battlefield because of a mental condition due to emotional suffering, especially when it was caused by the memory of a traumatic event, even though real, was extremely controversial and unacceptable during the early 20th century. Many physicians believed that soldiers should be treated with military discipline instead of medical treatment. As in earlier days, emotional suffering derived from psychological pain was seen as a moral weakness and lack of courage [15]. Such position led to the stigmatization of combatants afflicted by Shell Shock. They were considered weak which in turn fostered the idea of an individual psychiatric illness. Despite this and because of the many sufferers, some army doctors and military authorities thought combatants were malingering; and as today still accepted, classified them as

pretenders and pathological liars [4], [13]. As a consequence, and linked with common practices within the medical field, attention was placed in defining such suffering through a system of classification oriented towards determining a supposed differential diagnosis. As a result of this attempt, Shell Shock was classified into two categories, exclusively recognized either as wound or as sickness.

The distinction was made according to the alleged cause and two categories emerged from this ideation: Shell Shock W or Wounded and Shell Shock S or Sickness. The first, classified as wounded, included soldiers who experienced a bomb explosion. These soldiers were considered war heroes and could expose their body and physical marks. Because of their experience, they were acknowledged with some type of compensation for their brave services. Interestingly, they were recognized as courageous because of the risks they undertook and their endurance to battle without limits. Although these soldiers exposed themselves carelessly and seemed unable to feel fear, risk, or threat, they were perceived as being psychologically insane but nevertheless, courageous, and brave. Curiously, such insanity was highly priced and considered morally as desirable [4], [13].

On the other hand, combatants labelled with the diagnosis of Shell Shock S or Sickness were viewed as sufferers caused not by wounds but by their traumatic memory. Although some of these soldiers had never experienced an explosion, they were affected emotionally or psychologically by the horrors of warfare. These soldiers were recognized as sick but not wounded. Sickness was equivalent to emotional or psychological trauma, and thus related to a nervous breakdown, it was often accompanied by extreme pain and suffering. Paradoxically, those who were considered sick were thought of as cowards, and as expected, did not receive acknowledgements or compensations. In addition, they were thought as a threat for the moral bravery and courage needed on the battlefield; they were often sent back to the battlefront as a form of punishment. This punishment was meant to strengthen their weakness to maintain war morality within the troops [1], [4], [13].

In Europe, as the number of Shell Shock sufferers increased, attention shifted towards more pragmatic considerations. As a result, various diagnostic and therapeutic technologies emerged. Some of these were based on the purpose of enhancing treatment effectiveness. One of the treatments included recovery next to the frontline, which aimed to avoid desertion. Thus, prompt treatment was deemed the best because it supposedly offered optimal results and an earlier recovery. Furthermore, another technology was considered for treating emotional suffering that was based on overworking the soldiers to the point of exhaustion. Another type of therapy suggested rest, self-isolation, sleep, psychotherapy, and being well- fed to fully recover [8], [13]. On the contrary, other currents of thought that have the common feature of suspicion among army physicians proposed punitive treatments. These treatments, oriented by the idea of punishment, consisted of isolation and others included the use of electrical current (faradization) [8], [13], [16].

Around 1916-1917, Psychoanalysis took its stance against brutal therapy by proposing an approach based exclusively upon the words of those suffering traumatic Shell Shock or War Neurosis, indistinctly. "They proposed an approach based exclusively on the words of the patient. They also denounced the use of persuasion or intimidation, preferring to devote themselves to listening to the psychically wounded […] Abraham and Tausk stood up on several occasions in defense of soldiers prosecuted for desertion, arguing that their attitude, while it was reprehensible from the military point of view, was the result of a reactive disorder […]" [1]. Victor Tausk took interest in understanding the psychology of the sufferer conceived as a deserter. He went as far as to develop a parallel between deserters and Shell Shock as not cowards. "The source of their illness was to be found neither in their conscious motivation nor in the event itself, but rather in their unconscious-in other words, in something that was out of their control and more powerful than their will" [1]. Even though, "Karl Abraham took the view that it was the power of intrapsychic conflicts in Shell Shock sufferers that prevented them from adhering to the just principles of warfare" [1]. Supposedly, by bringing the unconscious into scene, some truthfulness was recognized towards the suffering with respect to the suspicion that had arisen around the idea of malingerers. But the consequence was that such suspicion was shifted towards the unconscious desire of avoiding combat; nevertheless, it was considered not sufficient to explain War Neurosis. "The problem was with the patient, not with the war" [1]

> The norm is for soldiers always to endure war conditions. Even the most progressive, audacious, and ardent defenders of neurotic patients, like Victor Tausk, made the same observation: these men were motivated by an unconscious desire to avoid combat. Some

> German psychoanalysts even took the view that these patients were traumatized not by what they had experienced, but rather what they had not wanted to face [1].

Meanwhile, in the United States during 1917, Thomas Salmon, who was a trained psychiatrist in the British Army, developed the first officialized treatment technology for Shell Shock within the U.S. Army. As others emphasized upon the importance of prompt treatment following the onset of symptoms, he proposed for therapy to be administered as close to the battlefield as possible. This therapeutic device shifted the focus from symptomatic towards a more preventive intervention. Field Hospitals were built near battlefronts; and attention was directed upon more pragmatic concerns, such as efficiency based on therapeutic results rather than in comprehending the etiology or fostering theoretical explanations for causes of psychological or emotional suffering [17]. As a result, supposed pathological features were considered symptoms and assumed to be commonly expected consequences of warfare and thus were not disputed as untruthful. The problem revolved around how to ensure a prompt recovery in order to lessen its effects upon the individual who suffered and in the fighting morale of the troops.

By the end of the Great War, attention towards developing tools for determining suspicion or truth of suffering became important issues due to the expansion of sufferers and the resistance towards the war. For this reason, the Southborough Committee was put together with the purpose of determining the authenticity of suffering within veterans in order to establish a valid proof for their claims. Meanwhile, many veteran doctors and army forces doctors doubted the truthfulness of those who suffered from Shell Shock. Suspicion increased exponentially. Diverse positions were assumed by these physicians. Some appealed to their moral duty to maintain the valued war morale. An example of this moral stance lies in Lieutenant Colonel Lord Gort VC, who sustained that Shell Shock ‘must be looked upon as a form of disgrace for the soldier’ and not as a real suffering [18], [19]. On other grounds, an active anti-war mobilization within human rights movements pursued the recognition of suffering due to war as proof for recognition and compensation. In this sense, Billy Tyrrell, a veteran and physician who experienced a nervous breakdown after First World War, declared:

> ‘Shell-shock’, it was agreed, was a meaningless word because 90-95% of ‘shell-shocked’ soldiers were suffering not from shock caused by an exploding shell but from a nervous breakdown brought about by fear, fatigue and horrific experiences [13].

An intricate cobweb of proofs, fakes, phrases, authentic or legitimate suffering, brought into the scenery a knot of controversies. In order to avoid dealing with such differences, and as a solution, the use of Shell shock was abolished by the Committee in the British Army. Likewise, Germans also banned their term for Shell Shock, Kriegsneurosen, under the assumption that the causes of suffering relied upon a better selection of prospective soldiers. This, to evade considering the problematic issue of suffering as a result of warfare. In this sense, a eugenic approach was applied to select soldiers through more developed filters to guarantee the prevention of suffering due to warfare. Based on the idea of fitness associated with a strong motivation, historical background, and courageous and brave moralities were considered elements for better selection [4], [13], [17], [20]. Moreover, they considered that mental disorders and emotional suffering jeopardized discipline and fighting morale. As a consequence, physically and mentally exhausted soldiers were dispatched to resting places. Those who remained resistant were sent to special wards in the so-called Lunatic Asylums. However, those who did not recover as expected were considered criminals and were either court-martialed as deserters, and often sent to concentration camps. Suffering was an affront to the obligation to serve the army or the country, which is ultimately a soldier's duty[21].

Before World War II, based upon the previous experience acquired from the intents to understand the effects of World War I, initiatives urged towards preventing mental casualties, especially by military psychiatrists. In this sense, army physicians launched a campaign to screen out unfit cases within soldiers, interpreting prevention methods as effective screening tools. This campaign, which was massively adopted, was oriented towards the discard of anyone who had ‘shown inability to adapt himself as an adult, socially-acceptable manner to demands of ordinary life, should not be chosen for military training’ [22]. Despitethe effort to avoid the rise of emotional suffering and psychological collapse, the incidences of psychological, mental or psychiatric illnesses increased in the Second World War in comparison to World War I. The heroic patriotism sustained during World War I was not present during the Second World War, this attributed to the increase in psychological, emotional and moral suffering [23].

Nevertheless, and surprisingly, "it did not produce an epidemic of mental illness. It soon became clear that the expected torrent of psychiatric cases was failing to appear" [13]. Thereafter, nervous breakdowns shifted to be considered as a risk rather than as a contingence. They were considered a result of 'hardship, excessive combat experience and unusually harrowing events which a normal personality cannot tolerate' [24]. This assumption placed the emphasis on the exposure of events that supposedly determined a weak personality responsible for the onset of symptoms in those sufferers [25]

Risk was the recruiting solution to point the gaze towards another direction. As an effect, a new system for the classification of mental breakdowns emerged in order to sustain the medical and army practices that would avoid defining a moral position towards what was circling in the atmosphere: the question about the horrors of war.

> In our system of selecting recruits the man with a varicocele or slight hernia is rejected, even though the greatest risk which accepting him would entail is the possibility that he himself might fail in an emergency. But no measures are taken to exclude the mental weakling, whose failure might lead to infinitely graver consequences, not merely to himself but to the whole of his unit. Even when the reality of such risks has been practically demonstrated by nervous breakdown, such men on recovery are still liable to be sent back to the firing line, in spite of what experience has now proved to be the certain knowledge that they will be useless as combatants and will almost certainly succumb at the first strain [26].

III. *War Neuroses*: Back to origins and further diagnostic technologies

Shell Shock was abolished by the Committee in charge of determining the facts and the truthfulness of psychological, emotional, and psychiatric suffering. As a result, army physicians expected that patients who suffered from War Neuroses, which included Hysteria and Neurasthenia, should recover promptly because the war had ended. However, the suffering remained, but it was still thought to be caused by traumatic memories. This depicted the experience of warfare as a threat, and the feelings of threat were assumed to be the basis for the psychological or emotional suffering in those individuals whose suffering lasted beyond exposure to war or injury. "Within a day of the Armistice, a senior American doctor told Congress, 2.100 of the 2.500 shell-shock patients awaiting return to the United States had been 'restored to normal'" [13].

Meanwhile, Hysteria was still used as a diagnostic device and mostly related to a list of numerous symptoms such as blindness, deafness, paralysis, and fits. As stated earlier, medical practitioners aimed to classify such symptoms to provide a reliable basis for differential diagnosis, a common practice within the medical field. Two types of diagnosis were described for this purpose: the first was based on the idea of prognoses, considering that those who recovered quickly had better onset. On the other hand, those whose recovery lasted longer, and thus treatment results were not as expected, had a different consideration. Complementary to this position, Dr. Millais Culpin stated that combatants who broke down quickly were also the hardest to recover due to their weakness. These considerations led to another distinction between sufferers that emerged at the scene, relating to the idea of 'false' or 'true' suffering. The soldiers considered as 'false' sufferers were presumed not to have a favorable background. Their predisposition made them more vulnerable, thus making their treatment recovery more difficult. On the other hand, those individuals with better 'backgrounds' were perceived as more fit. Therefore, they were expected to have better prognosis and faster recovery [13].

In this sense, combatants labeled as 'true' sufferers were considered to have minimal predisposition, and as stated before, better backgrounds. Despite the fact that they also suffered from War Neuroses, their recovery was expected to be faster because it was truthful; and it was expected to leave no sequelae. Once the background of the combatant was considered essential to the outcome of recovery, the diagnosis and treatment of sufferers was no longer pertinent since relevance lied upon the selection of soldiers who were more fit for war. Nevertheless, it was assumed that psychological and emotional suffering within higher military hierarchies was not fake, and officials received different treatments. Such differential approaches responded to military hierarchies and truthfulness depended on the rank [4].

An interesting divergence between positions of army doctors in Europe and the United States emerged during this time. Europeans believed that the main reason for soldiers´ resistance to recovery was due to compensations and labor laws. This was thought to affect the willingness to improve due to fear of losing such compensation. As a result, Europeans decided not to offer pensions before the Second World War. After the end of the War, they proposed for each case to be analyzed individually and independently. On the contrary, United States´ war physicians created a Commission, somewhat of a Bureau of Veterans, to support and to provide facilities for the recovery of soldiers, as well as a pension. They also ought to keep combatants in good conditions after warfare. At this juncture, truth and malingering acquired an important place within the understanding and healing of war suffering. This led to medical considerations based upon the healing of psychological and emotional suffering being used beyond its surface to advocate for law reform, human rights, compensation, and antiwar movements [1], [4], [13].

At this stage, interpretations and paradigms of War Neuroses, as previously stated, included Hysteria and Neurasthenia. Hysteria was redefined by a list of descriptive physical symptoms such as, either partial or complete loss over sensory, perceptual or motor functions, rather than trying to define its etiology or its onset. Interestingly, the most recognized physical symptoms reported among British soldiers were: "paralysis, contractures, muscle rigidity; gait disorders. seizures, tremors, spasms, tics, and uncontrollable blinking; narrowing of the field of vision and blindness; localized numbness and loss of sensitivity, localized pain and hypersensitivity; mutism, aphonia and stammering; deafness; fugue states, Ganser twilight state, amnesia, mental confusion, extreme suggestibility, loss of sensibility, persistence sensation of unpleasant smells and tastes, various cardiovascular symptoms; enuresis; gastrointestinal symptoms, including vomiting indigestion and diarrhea" [4]. In other words, a Rag bag of unrelated symptoms that have something in common: Being produced by physical lesions and other organic abnormal features of the nervous system, thus having physical proof.

The diagnosis of Neurasthenia inspired the works of George Bear, a British Neurologist that described a considerable number of sufferers from War Neuroses within combatants. Neurasthenia was reconsidered as an effect produced by the exposure to prolonged periods of intense mental and physical strain. Its onset could be gradual or sudden similar to Shell Shock. In addition, the cumulative effect of exposure was thought to have a reduction of endurance to withstand traumatic events. Once the threshold of resistance dropped below a certain critical level, the exposure to the next stressful event would precipitate the suffering considered as a syndrome. As in Shell Shock and Hysteria, the search for somatic or physical causes led to the acceptance of explanations from neurologists who considered it an analogy for nerve exhaustion. "Here again, putative neurological etiology connects a set of symptoms that would otherwise appear to be unrelated: anxiety, depression, emotional lability and irritability [...]" [4].

A third configuration named Disordered action of the heart (DAH), was also proposed in order to understand psychological and emotional suffering caused by warfare through other physical features. This said entity included mostly cardiac sensations and was thought to be caused by physical effort or by psychological stress. Nevertheless, it was assumed to be linked with some organic or physical type of abnormality [4], [13]. As before, the list of features described symptoms such as: "palpitation, high or usually low pulse rates, arrhythmic pulse, angina or precordial pain, high or low blood pressure, shortness of breath, fainting attacks, giddiness, severe weakness, unsteadiness, sweating fatigue and exhaustion, irritability, sleeplessness, headache, problems concentrating and nausea and vomiting" [4].

In contrast to Hysteria and Neurasthenia, DAH originated far from the frontline. Therefore, it was mostly used to diagnose soldiers during their training, which suddenly acquired an impressive expansion. DAH was also associated with other syndromes, such as Dacosta Syndrome, Effort Syndrome, Irritable Heart, Valvular Disease of the Heart, within the British; and Soldier's Heart and Neurocirculatory Asthenia within the US Forces. Not yet satisfied with one consented answer as an explanation for the suffering of encountering warfare, during 1917 a fifth classification appeared within the scene of war medical practice. This one was named Not Yet Diagnosed and was considered as an interim diagnosis that would serve while a reexamination took place in specialized hospital units. In general practice it was the most used and often the only diagnosis given for symptoms associated with the category of diseases considered within War Neuroses [4], [13].

This category shared two common features: firstly, a practical issue considering effects of symptoms that affected soldiers' performance on the battlefield; and thus, it was oriented towards the elimination or reduction of suffering in order to return soldiers to the frontline as soon as possible. In this sense, pain or suffering were considered wounds or injuries that diminished performance. Secondly, the interest in suffering by the Royal Army Medical Corps was an intent to characterize it as a "functional" rather than an "organic" disorder. It is important to mention that the interest in this distinction within the culture of medicine dates back to the 19th century. Such distinction led doctors to caution against what they considered a common error, and to equate "functional" with "psychological" [4].

The discussion that adopted the idea of suffering equating functional to psychological was approved and unquestionably followed by army doctors. Interestingly, it held an outstanding place within publications in Lancet and British Medical Journals during this time. These publications employed "functional" as a label for several descriptions of symptoms, grouped as syndromes, that included deviations from normal functioning and sustained biological causes. The naturalized relationship of War Neuroses, including a list of unrelated symptoms that were presumed to be caused by invisible "submicroscopic" and "unidentified" neurological lesions, and other abnormalities, was generally accepted. But the relationship also included "syndromes presumed to be caused by visible (identifiable) neurological conditions that are undetectable under ordinary circumstances, [similar to shell shock]; syndromes presumed to originate in unidentified biochemical changes that interfere with normal neurological processes [4], and syndromes presumed to originate in psychogenic factors including psychic conflicts" [4]. In this approach, psychogenic causes operated together with physical causes.

> In some instances, psychological causes (fright) and physical causes (typically shock waves) are described as having concurrent effects. Psychological factors are also described as operating consequent to physical causes (organic injuries). Finally, the psychological factors are also said to produce effects through the mediation of undetectable physical changes. Further, most army doctors were inclined to believe that flowed heredity and its constitution had a determining effect in the great majority of War Neurosis leading to the 19-century background of degenerationist theories [4].

In summary, army doctors accepted functional disorders as natural explanations for suffering derived from warfare as the cause for War Neuroses. Nevertheless, there was no consensus on what functional "signified" in regard to psychological factors. In the same way, etiology was considered unnecessary to diagnose or treat War Neuroses since it interested only a minority of physicians. "As a result, therapies and other techniques were pragmatic and eclectic-relying on time-proven combinations of suggestion, hypnosis, electrotherapy, sedation, reeducation, rest, and dietary regimen-and were not specific to any etiology[...]. In practice, calling the War Neuroses "functional disorders" intersected invisible mechanisms with ignorance" [4].

It is important to mention that the recognition of social cohesion within a group was an essential breakthrough during this time for maintaining morale and mental health between its members. This opened a social view of relationships heretofore unacknowledged in military psychiatry. A sociological perspective emerged from it that searched to understand emotional effects among veterans, even in Germany [27]. Nevertheless, without much progress or recognition.

IV. The architecture of trauma as a central clincher for *Post-Traumatic Stress Disorder*

In 1941 an interest for Traumatic Neurosis arose prior to the U.S Army's involvement in the Second World War. The American Psychoanalyst Abram Kardiner published The Traumatic Neurosis of War. Kardiner, a follower of Freud's ideas, wrote the first systematic account of the symptomatology and psychodynamics of War Neurosis in the United States. This work is considered a landmark in the history of traumatic stress disorders. Despite their confluences, Kardiner and Freud, both psychodynamics, had different points of view. Freud described the symptom formation as defensive, oriented to the preservation of the "self"; on the other hand, Kardiner thought that the symptomatic reaction was a form of adaptation. However, the essentialist view states that the kind of response or adaptation that occurs in a particular case will depend on the individual and his or her personal history, from which psychological resources and relations to primary social groups depend on[1], [4], [28]. In his work, Kardiner states that traumatic events create levels of excitation that the organism is not

capable of mastering, as a result, the individual loses control over his environment[28]. The discrepancy between Kardiner and Freud revolved around the idea that the alteration of the "self" by the traumatic experience pointed towards regaining mastery for adaptation. Kardiner stated that Traumatic Neurosis was accompanied by a list of features and a set of symptoms born from clinical observations and case studies of traumatic casualties during World War II. "Even though Americans prevailed, they suffered defeats, high casualties and low morale and large numbers of troops developed psychiatric symptoms" [4].

It is recognized that Freud and other psychoanalysts were key to the understanding of traumatic neuroses. However, they were unable to find answers to the effects that the Nazi extermination had in relation to the experience of Holocaust survivors. Stigmas linked to notions such as malingering, cowardice, selfishness, narcissism, secondary gain or class interest, even though unacceptable, were not overcome. As a consequence, "...the traumatic experience was repositioned to become a testament of the unspeakable. Whereas previously trauma related to an individual and subjective experience, the concept was now enlarged to represent universal experience" [1]

> [...] In the course of its brief and unfruitful partnership with military psychiatry, psychoanalysis, which had since the 1920s been developing theories of trauma independently of civilian work in traumatic neurosis, was to have its seminal encounter with the experience of the survivors of the Nazi concentration camps. The psychoanalytic advances, which had hitherto made little headway in the public arena, suddenly found a very broad audience. For the first time, it was possible to put words, concepts, and images to the unspeakable, an experience humanity coil not imagine: the planned, industrial-scale extermination of millions of individuals, with the aim of destroying what was human in mankind [1].

Psychiatric cases were divided into clinical syndromes based upon symptoms rather than etiology. The policy of the American Army Medical Corps during World War II was to treat psychiatric casualties close to the front line. When psychiatric problems were more severe, they received alternative forms of treatment: abreaction therapy, groups and personal psychotherapy, drug induced sleep therapy, convulsive shock therapy and occupational therapy. However, interest in War Neuroses faded until the year of 1955 when the Veterans Administration published a follow up study of men diagnosed with War Neurosis. The report presented epidemiological data through a melange of classifications and made no attempt to match the diagnosis and the categories with symptoms, nor to compare data sets. "Kardiner was impressed by the confusion of categories and symptoms states associated with the traumatic neurosis" [4]

> At the end of the war psychiatric thinking was already oscillating between a tendency to deny the existence of psychological problems among survivors (they had survived because they were strongest) and an opposite tendency to believe that the absence of feelings of persecution, nightmares, anxiety, and depression in a survivor was a sign of mental illness (a normal person should experience these symptoms) [1].

War Neurosis was conceived as lacking unity, and towards the end of the War, the War Department created a committee under the direction of Robert Spitzer, a psychiatrist from New York initially trained in Reichian psychoanalysis. Spitzer´s interest lay in giving psychiatry a more "scientific basis" supposedly as an effect of order and organization of psychiatric nomenclature, considered as an "anarchy." Under the direction of Spitzer, the American Academy of Psychiatry and the War Department Committee oriented their interest in opposition to psychodynamic explanations and in defining lists of criterial symptoms. Specifically, the American Academy of Psychiatry was interested in calculating the prevalence of mental problems in the general population. As a result, in 1974, Spitzer initiated a new psychiatric classification. Likewise, the National Institute of Mental Health (NIMH) that had been established in 1949 by the US Congress and had made epidemiology its priority; joined the enterprise of the Committee. In conjunction with NIMH, Spitzer centered his interest in major epidemiological problems and was focused on understanding the incidence of psychiatric impairments, rather than specific disorders [1].

The emergency of Post War studies intentionally avoided existing psychiatric nosology's because they thought of them as unreliable and a source of potential disputes among American Psychiatrists. Additionally, Post War psychoanalytic theories were unable to impose ideas or methods and abandoned the patriotic model.

After World War I, "Freud was convinced that everyone should participate in the war effort. In particular, he was resistant to issuing certificates to neurosis patients who consulted him, taking the view that these patients should serve their country like everyone else, since their symptoms were not incapacitating enough to justify releasing them from their duties" [1]. This assumption was based on his theory of the benefits oriented by secondary gains as subconscious profits from illness.

In Austria, psychoanalysis sustained a debate against the use of brutal techniques for treating War Neurosis. They proposed to give word to emotional wounds and offered to listen to the sufferers, bringing some consciousness to the scene. The unspoken horrors of war were surfaced by the words and images of survivors. However, bringing the unconscious into the scene introduced ambiguity. This shifted the suspicion to avoid combat since the unconscious motive was not distant from the conscious interest, at least in this period. As a result, there was no questioning of moral prejudices shared between psychoanalysis and psychiatrists. The violent event caused neurosis to emerge but was not considered its cause, it was attributed to the subject´s early life. They rejected the idea that the event was not determinant, but rather that the personality, history, sexual conflicts, patriotic aspirations, among others, were the cause of the suffering. "The norm is for soldiers always to endure war conditions" [1]. "Their illness was not the product of historical circumstance but of their own tendencies" [1] "The reality of their trauma was still being measured in terms of their personal fragility. Nevertheless, in September 1945, after a three month stay in London, Jacques Lacan expressed enthusiastic approval of these practices, which he saw as deriving their efficacy from Freudian psychoanalysis, and which he pronounced revolutionary [...] Lacan omitted to mention that the military authorities had quickly terminated the experiments of John Rickman and Wilfred Bion at North field Hospital]" [1].

> Nevertheless, before Freud testified in Wagner von Jauregg´s trial in 1920, he had played only a minor role in the controversy. It was his disciples who had the greatest influence, notably Karl Abraham, Sándor Ferenczi, Ernst Simmel, and Victor Tausk. Today these four psychoanalysts are generally considered the true originators of the modern theory of psychic trauma, even though each in his own way drew heavily on Freud's work. Their contribution, however, was not limited to theory. History also records that they were among the first to oppose the therapeutic brutality imposed on those suffering from war neurosis [1].

Furthermore, Washington University developed a protocol to undertake low-cost large scale epidemiological studies for specific disorders; the protocol expanded to cover 25 major diagnostic categories renamed as Research Diagnostic Criteria. These criteria were part of a collaborative study of the psychobiology of Depression funded by the NIMH that worked in conjunction with the Task Force in charge of the third edition of the Diagnostic Statistical Manual (DSM III). The purpose of this joint action was to access reliable diagnostic technologies, necessary for establishing the supposed validity of mental classifications. "The term validity recurs throughout the psychiatric research literature, indicating that a given classification processes intrinsic unity: it is neither a random phenomenon nor an artifact studied" [1].

On the other hand, in 1974 research developed by the American Psychiatric Association (APA) appointed a Task Force that included Robert Liston and Marc Horowitz, among others, who had contributed to the understanding of the survivor syndrome as a result of the holocaust. The task force intended to work on nomenclature for a new edition of the APA Diagnostic and Statistical Manual of Mental Disorders (DSM). This was based on the idea that what was missing during the previous works was the lack of a standardized psychiatric nosology. The then standardized nosology in American Psychiatry was considered a system of classification based on a list of criteria, features, and Aristotelian principles of inclusion and exclusion. As a consequence, in 1979 the APA board of Trustees approved the draft edition of the DSM III published in 1980. This Manual contains an inventory of 200 mental disorders grouped into categories based on shared features. Each malady is defined by a list of features individually necessary and collectively sufficient that helped narrow down a diagnosis. It is worth mentioning that before the DSM III, the APA shared no common or standardized nosological language; thus, it claims that the Manual provides this achievement of offering a diagnostic metalanguage based on the ideas of a clinical behavioral psychological pattern often associated with a painful symptom. This diagnosis was considered both a distress and an impairment of human functioning (disability). This process intends to avoid uncomfortable divergences between recognized physicians, sufferers, and activists. "Away from talking about mental disorders that is not particular to any theoretical orientation because

it is based on features -overt behaviors, biochemical markers, cognitive deficits, and so on- that should be visible to any competent observer" [4].

It is important to mention that this period was characterized by enormous differences within psychiatric approaches: those that followed Freudian psychodynamic clinical, while others ascribed Kraepelin's psychiatric nosological notions. Emil Kraepelin was a German psychiatrist, considered as the founder of "scientific" psychiatry, psychopharmacology, and psychiatric genetics.

> The rediscovery of Kraepelin by American psychiatrists was during the 1970s. Years before, especially during the 1950s, psychological suffering was related to an organic or biochemical etiology. With the development of pharmacology, psychiatrists walked away from disorders that could be treated by barbiturates and phenytoin which led to it being considered as a neurological problem. It was purging itself of these biological based disorders that psychiatry remained essentially psychological [4]

But in the 1950s, with the emergence of psycho-active drugs, pharmacology turned to be a very effective technology. Drugs were incorporated within the psychiatric practice based upon response to descriptive symptoms that were conceived as patterns for parallel classifications. These classifications, as well as pharmacology, led to the support for the need of experimentally based science, in which Kraepelin's approach worked well.

Even though the director of the DSM Committee, Robert Spitzer, and Kardiner were both colleagues and professors at Columbia University, their differences were substantial. However, the DSM III Committee opted to ascribe to Kraepelin´s line. Curiously, Spitzer invited Kardiner to participate in the Commission, but his psychodynamic appreciations were not considered. The augment underneath the differences between Psychodynamic oriented and Psychoanalysts was presented as an economic interest questioning the argument of its long lasting and complex therapeutic treatment, which implied high costs especially to the Federal Health System. The controversy was resolved with a uniformed system based on a descriptive and objective list of symptoms that offered homogeneity and common operational language for clinicians and researchers.

> In Spitzer´s own words, the new edition was to be based on two principles: theories of pathogenesis would be confirmed by "principles of testability and verification," and each disorder would be identified by criteria accessible to empirical observation and measurement. Because the new classification system would be based on atheoretical and operational criteria, people of different theoretical perspectives would be able to write and talk about the same set of disorders, and researchers would be able to communicate directly with clinicians [4].

V. The materialization of Post-Traumatic Stress Disorder

The Vietnam War brought new paradigms into military psychiatry, a discipline in which the importance of combat exposure was recognized as a major issue involved in war-related nervous breakdowns. As a result, the Date of Expected Return from Overseas was established as a policy to decrease war exposure within soldiers who were to serve one year in combat [20]. Nevertheless, the number of acute psychiatric casualties decreased at the beginning, thus considering this policy a success. Attempts to normalize warfare by army doctors and militaries, intended to present the policy as a "safe period of time" that aimed to lessen the exposure of soldiers to combat. However, this perspective changed radically in 1968 as psychiatric symptoms reappeared in Vietnam Veterans after the Vietnam War ended; as it had happened before with the Second World War [29]. Added to this, a strong anti-war movement fostered rejection and victimization towards U.S. soldiers who had fought in Vietnam. Unlike servicemen during World War II who came home as heroes, most Vietnam veterans returned without honor and, in some cases, were even viewed as deviant, psychotic killers, and drug abusers [13], [30].

Vietnam was probably 'the first war in which the forces of modern pharmacology were directed to empower the battlefield soldier'.

> Psychoactive substances were issued not only to boost the fighters, but also to reduce the harmful impact of combat on their psyche. In order to prevent soldiers' mental breakdowns from combat stress, the Department of Defense employed sedatives and neuroleptics. By and large, writes David Grossman in his book On Killing, Vietnam was "the first war in which the forces of modern pharmacology were directed to empower the battlefield soldier." For the first time in military history, the prescription of potent antipsychotic drugs like chlorpromazine, manufactured by GlaxoSmithKline under the brand name Thorazine, became routine. The massive use of psychopharmacology and the deployment of a large number of military psychiatrists help explain the unprecedentedly low rate of combat trauma recorded in wartime: Whereas the rate of mental breakdowns among American soldiers was 10 percent during the Second World War (101 cases per 1,000 troops) and 4 percent in the Korean War (37 cases per 1,000 troops), in Vietnam it fell to just 1 percent (12 cases per 1,000 troops) [31].

Prescription of tranquilizers and antipsychotics by psychiatrists in the battlefield was aimed to reduce psychiatric casualties and superseded the development of effective coping mechanisms. Pharmacological psychotherapy, such as using Thiopental, was accepted as a treatment for mental distress in order to induce the dreamlike state that would lessen the patient's traumatic experiences [32]. In addition, substances such as Dextroamphetamine and Codeine contributed to the spread of drug use and, in some cases, increased aggression. These drugs were administered with the intention of enhancing soldiers' performance, but instead ended up masking their suffering and fostering a new generation of drug addicts [31]. Such adverse outcomes were compounded by the absence of the typical unit morale and cohesion because of the one-rotation policy and lack of an all-out attempt to win the war due to the lack of support [33].

PTSD was introduced in the DSM-III in 1980. Many speculated that this diagnosis was included due to pressure from media, veterans, and military psychiatrists. The term encompassed post-combat symptoms from Vietnam and other prior armed conflicts into one disorder. It soon turned into a generalized formula for combat effects and other contingencies. Prior to the DSM-III, it was presumed that nervous breakdowns on the battlefield were short- lived disorders; but if the soldier never recovered, they were perceived as non-war-related [34].

The emergence of PTSD as a chronic psychiatric disorder introduced other controversies. Some authors sustained that it was added because of political and social influences rather than real scientific proof. Paradoxically, studies concerning the etiology and epidemiology of PTSD took place after the DSM-III [35], [36].

Furthermore, supposed tendencies in veterans to exaggerate symptoms in psychometric studies and false descriptions of combat effects factored into a legal battle of overcompensation laws. Some claims encompassed malingering acts, while others revealed truthful psychiatric effects secondary to warfare. Conveniently, 'new symptoms' described by activists matched PTSD symptoms and served as proof of the acceptance of victimization as a new paradigm to obtain compensations and profits. However, doubt and suspicion with respect to veracity of testimonies became controversial political issues. Despite the above, PTSD paved the road for the rise of pharmacology which brought as an effect the medicalization of suffering derived from warfare and finally turned it into psychiatric disorder [1], [37], [38].

> Redefining the condition formerly known as traumatic neurosis meant that the concept would recast free the stigma of suspicion […] Adopting the new name of post-traumatic stress disorder (PTSD), the task force quickly agreed to abandon the term "neurosis". While the movement to eliminate this term in other categories (particularly depression and anxiety disorders) met with remarkable hostility, to the extent that the whole process of revising DSM was called into question, there was broad consensus on the abandonment of "neurosis" in the definition of trauma reactions. Nevertheless, this marked a sea change with profound political implications. By jettisoning "neurosis", the architects of the new DSM were rejecting a century-old legacy of suspicion [1]

VI. Discussion

Authors such as Ian Hacking [2], [3]; Allan Young [4]; Didier Fassin and Richard Rechtman[1]; and Restrepo-Espinosa [39], [40] have developed a critical perspective and in their works have unveiled hidden historic controversies behind the use of ideas and notions such as trauma in relation to human suffering derived from warfare. This notion of trauma is a powerful cobweb that intersects social and historical contexts in controversial landscapes of scientific knowledge and technologies. It is responsible for the varied effects of the brushstrokes of a complex weave around the sensible issue of human suffering as an effect of warfare. Conceived as a technical object, and as a product of human action and scientific thought, it is impossible to separate it from social and political milestones of human history, at its in turn connected to currents of ideologies and political stances in the medical discipline.

Nevertheless, medical technical explanations of human suffering, either physical (visible and organic), psychological (behavior, emotion and morality) or psychic (repression, guilt, suggestion, dissociation or neurosis), are still problematic in terms of their acceptance as real or untruthful acts. In fact, the idea of malingering was fostered due to an ambitious drive for economic compensation and social recognition within sufferers. Malingering, conceived as the wolf in sheep's clothing, continues to be a core issue when dealing with human suffering in the medical field. Needless to say, it is still relevant to the interests of patients or sufferers, compensations, and labor and human rights laws. The Empire of Trauma is an obliged reference to seriously understand the relationship between human pain and collective suffering, which, as proven, is an intricate cobweb. Infinite radii of a plural links and connections, some strongly supported, others weakly pasted, lie within multiple and diverse stances.

In this metaphor of the web, "technical objects," such as Shell Shock, War Neurosis, Hysteria, Neurasthenia, and PTSD, contain a genealogical history of their emergence, and the ways they linked human suffering with trauma and warfare. Unveiling the unique threads of the web nodes, trauma travels through connections with the traces of notions such as memory, courage, fear, shame, and guilt, that give it a transitive power. Interestingly, in this detour that the course of trauma is weaved, disciplines such as neurology, psychoanalysis, and later psychiatry, have an important role in its architecture. Trauma is a "technical object" that emerged from warfare, medicine, and other disciplines that has constructed and produced ways of understanding pain and suffering. The creation of new mental technologies is a common practice in medicine [2], [3].

The diverse scientific conventions around human and social suffering derived from warfare evolved from the controversies that arose from a physical approach (organic lesion) to a psychological, and later "humanitarian" one. The first approach unravels through the discovery of memory as an explanatory device for neurological and physical pain from railway accidents and warfare. Later, because of the impossibility to explain certain suffering without an organic explanation, a search for understanding affections derived from emotions (fear and shame) unfolded into a moral idea that places shame and guilt in the core. The presence of guilt and compensations from laws lead to the suspicion of untruthful suffering (malingering). Psychoanalysis turned its attention towards the understanding of traumatic neurosis through psychic functions in individuals (repression and suggestion) and fostered the idea of memory and self-causation for pain and suffering. During the Vietnam War, trauma accomplished an outstanding position. It bounds physical and psychological effects and allows the discrimination between truthful sufferers (victims) and malingerers (suspects). With the emergence of the DSM-III, a new object is introduced, mainly by army doctors and psychiatrists, PTSD. This, as exposed previously, represents a turning point in this cobweb [4].

Medical differences stood upon a disciplinary and personal quarrel around the search for understanding neurosis and trauma. Nevertheless, the dispute was moved by the interest in determining who was right or wrong and what was true or false, reaching its maximum expression during the Vietnam War with the invention of PTSD [1]. PTSD acquired power because of analytical techniques developed by army physicians and military psychiatrists. Techniques, such as statistics and biomedical analysis, provided evidence for the description of symptomatology caused by suffering from warfare. As a consequence, PTSD acquired the capacity to expand its influence in other areas, events, and contexts. However, pain and suffering were excluded. Observable behaviors and symptoms acquired relevance since they could be measured and proved, gaining a positive valid status. Almost without doubt, PTSD was accepted as a generalized explanation for pain and suffering due to warfare.

Nowadays, the extended and indiscriminate uses of PTSD for describing suffering derived from multiple contingencies or varied elements such as natural disasters, terrorism, and war conflicts. The idea of PTSD as an empire is supported within diverse cultures, and medical and psychological disciplines [1], [18]

VII. Conclusion

The route proposed in this paper follows the emergence of each of these technical objects. Second, it includes a review about other notions related to the experience of human suffering. A third part discusses the effects of the technical objects mentioned above. Finally, the concluding paragraphs present relevant reflections for medicine related to the unquestioned effects of uses of PTSD nowadays. Despite these considerations and reflections, however, new forces have emerged from vanguard psychiatry to create resistance and to put into consideration questionable social order and values. An example is the actual polemical diagnosis of normal distress that emerged from those who opposed war as a paradigm for social order [35]. This implies a close scrutiny upon this extended and often unquestionable use: for example, the use of trauma as biopolitics [1]–[3], [6], [39], [40].

Theories are not checked by comparison with a passive world with which we hope they correspond. we do not formulate conjectures and then just to look to see if they are true. We invent devices that produce data and isolate and create phenomena, and a network of different levels of theory is true to these phenomena…Thus there evolves a curious tailor-made fit between our ideas, our apparatus, and our observations [4].

Acknowledgements

The authors thank Dr. Christian Barrera for his participation in the writing of the first draft. Also, a special recognition to Valeria Ramirez for the careful revision of this manuscript.

References:

[1] D. Fassin and R. Rechtman, *The Empire of Trauma: An Inquiry into the Condition of Victimhood* (Princeton University Press, 2009).

[2] I. Hacking, *Rewriting the Soul : Multiple Personality and the Sciences of Memory*(Princeton University Press, 2001).

[3] Ian. Hacking, *Mad travelers : reflections on the reality of transient mental illnesses*(Harvard University Press, 2002).

[4] A. Young, *The Harmony of Illusions: Inventing Post-Traumatic Stress Disorder*, 3rd ed (Princeton University Press, 1997).

[5] S. Tekin, The missing self in hacking's looping effects, *Classifying psychopathology: Mental kinds and natural kinds* (Boston Review, 2014) 227–256.

[6] Deuteronomy, Deuteronomy 20:1-9 NIV - Going to War - When you go to war - Bible Gateway. https://www.biblegateway.com/passage/?search=Deuteronomy%2020%3A1-9&version=NIV

[7] Carus, T.L, *De rerum natura: A translation* (Harvard University Press, 1975).

[8] M.-A. Crocq and L. Crocq, From shell shock and war neurosis to posttraumatic stress disorder: a history of psychotraumatology, *Dialogues Clin Neurosci, 2(1),* 2000, 55.

[9] E. Josse, Le vent du boulet des soldats des guerres d'Empire, *European Journal of Trauma* &Dissociation, 3(2), 2019, 143–145.

[10] P. Pignol and A. Hirschelmann, La querelle des névroses : les névrosestraumatiques de H. Oppenheim contrel'hystéro-traumatisme de J.-M. Charcot,*Information Psychiatrique, 90(6),* 2014, 428.

[11] "neurosis | Search Online Etymology Dictionary." https://www.etymonline.com/search?q=Neurosis (accessed Oct. 26, 2022).

[12] B. Holdorff and D. T. Dening, The fight for 'traumatic neurosis', 1889–1916: Hermann Oppenheim and his opponents in Berlin1,*History of Psychiatry, 22(4)*, 2011, 465-476.

[13] B. Shephard, *A war of nerves : soldiers and psychiatrists in the twentieth century* (Harvard University Press, 2001).

[14] S. C. Linden and E. Jones, 'Shell shock' Revisited: An Examination of the Case Records of the National Hospital in London, *Medical History, 58(4),* 2014.

[15] E. Jones and S. Wessely, Battle for the mind: World War 1 and the birth of military psychiatry, *Lancet, 348(9955)* 2014, 1708-1714.

[16] L. Tatu and J. Bogousslavsky, World War I Psychoneuroses: Hysteria Goes to War,*Front Neurol Neurosci, 35*, 2014, 157-168.

[17] T. W. Salmon, *The care and treatment of mental diseases and war neuroses ("shell shock") in the British army*(New York City: War Work Committee of the National Committee for Mental Hygiene, Inc., 1917).

[18] American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders,2013.

[19] H.M. Staionery Office, Report of War Office Committee of Enquiry into 'Shell Shock.,' *Brain, 45(2),* 1922, 319/320.

[20] S. Wessely, Twentieth-century Theories on Combat Motivation and Breakdown,*Journal of ContemporaryHisoryt, 41(2),* 2006.

[21] R. Kloocke, H. P. Schmiedebach, and S. Priebe, Psychological injury in the two World Wars: Changing concepts and terms in German psychiatry, *History of Psychiatry, 16(1),* 2005, 43-60.

[22] W. Porter, The Military Psychiatrist at Work, *American Journal of Psychiatry, 98(3),* 2006, 317-323.

[23] H. Pols, Waking up to shell shock: psychiatry in the US military during World War II,*Endeavour, 30(4),* 2006, 144-149.

[24] C. Bird, From Home to the Charge: A Psychological Study of the Soldier, *American Journalof Psychology, 28(3),* 1917, 315.

[25] M. Miller, Aftermath of Operational Fatigue in Combat Aircrews, *American Journal of Psychiatry, 101(3),* 1944, 325-330.

[26] G. E. Smith, Shock and the Soldier, *The Lancet, 187(4834),* 1916, 853-857.

[27] E. A. Shils and J. Morris, Cohesion and Disintegration in the Wehrmacht in World War II on JSTOR,*The Public Opinion Quarterly, 12(2),* 1948, 280-315.

[28] A. Kardiner, *The traumatic neuroses of war* (Martino Publishing, 2012)

[29] N. M. Camp, The Vietnam War and the ethics of combat psychiatry, *American Journal of Psychiatry, 150(7),* 1993, 1000-1010.

[30] Boston Publishing Company, *The American experience in Vietnam : reflections on an era*(Zenith Press, 2014).

[31] L. Kamienski, The Drugs That Built a Super Soldier, *The Atlantic,* 2016, Available at https://www.theatlantic.com/health/archive/2016/04/the-drugs-that-built-a-super-soldier/477183/.

[32] H. Pols and S. Oak, WAR & Military Mental Health: The US Psychiatric Response in the 20th Century,*American Journal of Public Health, 97(12),* 2007, 2132.

[33] B. S. Levy and V. W. Sidel, Adverse health consequences of the Vietnam War,*Medicine, Conflict and Survival 31(3-4),* 2015, 162-170.

[34] J. DiMauro, S. Carter, J. B. Folk, and T. B. Kashdan, A historical review of trauma-related diagnoses to reconsider the heterogeneity of PTSD, *Journal of Anxiety Disorders, 28(8),* 2014, 774-786.

[35] P. R. McHugh and G. Treisman, PTSD: A problematic diagnostic category, *Journal of Anxiety Disorders, 21(2),* 2007, 211-222.

[36] S. Wessely and E. Jones, Psychiatry and the 'Lessons of Vietnam': What Were They, and Are They Still Relevant?,*War Society, 22(1),* 2004, 89-103.

[37] B. C. Frueh, M. B. Hamner, S. P. Cahill, P. B. Gold, and K. L. Hamlin, Apparent symptom overreporting in combat veterans evaluated for PTSD, *Clinical Psychology Revie, 20(7),* 2000, 853-885.

[38] S. M. Southwick, A. Morgan, A. L. Nicolaou, and D. S. Charney, Consistency of memory for combat-related traumatic events in veterans of Operation Desert Storm,*American Journal of Psychiatry, 154(2),*1997, 173-177.

[39] M. H. Restrepo-Espinosa, *Desplazamiento forzado y transmutaciones del destierro* (Universidad Nacional de Colombia, 2017).

[40] M. H. Restrepo-Espinosa, *Entre trauma, víctimas y vulnerables biopolítica, desplazamiento forzado Interno y salud pública*(Universidad Nacional de Colomnia, 2015).