Shell Shock: An essay

April 9, 2020

Introduction:

This is a syndrome of signs and symptoms found in some patients who have been traumatized during a terrifying wartime experience. This diagnosis was commonly made in WWI by allied doctors caring for soldiers traumatized in battle, especially those that had been in the trenches where soldiers were under enemy fire, heard bombs going off, lived in filth, could not sleep, lived in fear and saw death all around them.

For a major review article on shell shock see: 'Shell shock' Revisited: An Exam-ination of the Case Records of the National Hospital in London**.** Stefanie Caroline Linden1,* and Edgar Jones2, *Med Hist.* 2014 Oct; 58(4): 519–545 available in full online at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4176276/. It in cludes a useful bibliography. Table 2 has a valuable list of the various physical and psycholgoical traumas that preceeded functional disorders. See: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4176276/table/tab2/ .

Controversy over existinece of shell shock during WWI:

The diagnosis was controversial at the time of WWI. For details see the entry for "Craiglockhart:". Non-believers considered shell shock to be a "feminine failing". (Bury JS. Remarks on the pathology of war neuroses. *Lancet* 1918; i: 97-99). Nonetheless, there are cases on record of it affecting very tough and courageous soldiers incuding the War hero and war poet, Owen.

In Britain, the diagnosis of "shell shock" was no longer made following the findings of a special committee in 1922.

Report of the War office Committee of Inquiry into Shell Shock. London: His Majesty's Stationery Office, 1922 partially available online from Google Books at: https://books.google.ca/books?id=O5_XdP-VSZsC&printsec=frontcover&dq=Report+of+the+War+office+Committee+of+Inquiry+into+Shell+Shock&hl=en&sa=X&redir_esc=y#v=onepage&q=Report%20of%20the%20War%20office%20Committee%20of%20Inquiry%20into%20Shell%20Shock&f=false

The epidemic of shell shock as a result of battlefield psychological trauma in WW1:

The English opened their first hospitals for shell shock in about 1914. “These institutions were increased in numbers as the war proceeded, and in many cases were continued long after the cessation of hostilities.” (The end-results of the treatment of shell-shock. Thomas Graham Brown, *J Neurol Psychopathol*. 1927 October; 8(30): 146–147 available online at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1068526/pdf/jnpsycho00038-0054.pdf.)

The cause was the mmassive mental and physical trauma endured by the soldiers.

British trench near the Albert–Bapaume road at Ovillers-la-Boisselle, July 1916 during the Battle of the Somme, photographed by John Warwick Brooke. P

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This image shows a German trench which was occupied by British Soldiers near the Albert-Bapaume road at Ovillers-la-Boisselle, July 1916 during the Battle of the Somme. The men are from A Company, 11th Battalion, The Cheshire Regiment. There appears to be a dead body in the trench. One soldier with a gun seems to be looking out for the enemy. By all accounts, trenches were amongst the most terrifying places on earth. Sleep would have been near impossible. Death was everywhere.

Casualties of War, WWI British, Photographer unknown. P

Public domain image retrieved from:
http://www.oucs.ox.ac.uk/ww1lit/collections/item/3599?CISOBOX=1&REC=8

The rows of the dead, to be buried remind us of the horrific scenes the survivors were exposed to including those who developed shell shock.

After the war, one of the soldiers who was interviewed about their shell shock experiences was the British stretcher bearer William John Collins. He had served with 1st Cavalry Field

Ambulance, Royal Army Medical Corps on Western Front, 1915-1918. Here are links to audio tapes of him entitled “Reactions to shell fire and dealing with shell-shock” taken from the Imperial War Museum we site:

http://www.oucs.ox.ac.uk/ww1lit/collections/item/1154?CISOBOX=1&REC=9

http://www.oucs.ox.ac.uk/ww1lit/collections/item/1153?CISOBOX=1&REC=10

He explains how when he came under shell fire he would “jump at every sound”. He also explained that “In those days shell shock had just come to be recognized…by the authorities.”

Historical notes on the use of the term “shell shock”:

Wikipedia states: “The term "shell shock" came into use to reflect an assumed link between the symptoms and the effects of explosions from artillery shells. The term was first published in 1915 in an article in The Lancet by Charles Myers. (Myers, C.S. "A contribution to the study of shell shock". *Lancet*, 1', 1915, pp. 316–320.)

Charles Samuel Myers, c1920.P

Public domain image found in Wikimedia Commons.

Charles Samuel Myers (1873-1946) received “a commission in the Royal Army Medical Corps and in 1916 he was appointed consultant psychologist to the British armies in France with a staff of assistants at Le Touquet.[16] In 1915 Myers was the first to use the term "shell shock" in an article in *The Lancet*, (See: Myers, C.S. (1915) "A contribution to the study of shell shock". *Lancet*, **1'**, pp.316–320 and see: Bruce, V. (2001). "Centenary: Coming of age." *The*

Psychologist, 14(1), 28–29.) though he later acknowledged in 1940 that he did not invent the term. (Myers, C.S. (1940) *Shell shock in France 1914–1918, based on a war diary*, Cambridge University Press) He tried to save shell-shocked soldiers from execution."(Wikipedia, 2016 citing: "Centenary: Charles Samuel Myers (1873–1946), Costall, A. (2001) *The Psychologist*, 14(9), 464)

"Dottyville"—Craiglockhart War Hospital:

Definition:

This was a famous hospital and shell-shock treatment in the First World War. It was set up to deal with the many psychological casualties of the muddy trenches especially after the battle of the Somme in 1916. (See: http://en.wikipedia.org/wiki/Battle_of_the_Somme.)

Massive trauma at Somme:

To understand the patients in Dottyville, it is important to understand what happened at Somme. The first day of the battle saw the British Army suffer the worst day in its history, suffering nearly 60,000 casualties. The scenes were horrific beyond belief. It is little surprise there was massive psychic trauma.

Craiglockhart Military Hospital "Dottyville". P

Public domain image accessed from The First World War Poetry Digital Archive
http://www.oucs.ox.ac.uk/ww1lit/collections/item/5403?CISOBOX=1&REC=2

Doctors and Nurses at Craiglockhart during WWI. P

Public domain image accessed from The First World War Poetry Digital Archive
http://www.oucs.ox.ac.uk/ww1lit/collections/item/4237?CISOBOX=1&REC=4

Dr. William H. Rivers (Sassoon's doctor) is sitting on the front row, left, between the two nurses.

Contribution to the concept of a psychosomatic stressor:

The concept of a psychosomatic stressor for physical symptoms was partly developed at Craiglockhart.

Doctors Bryce, Rivers, Brock and Brown:

At the time it was opened in October 1916, Major William Bryce, a local physician, was made commanding officer. William Halse Rivers was the hospital's most celebrated staff member. He was by all accounts an amazing person and a role model for future generations of doctors. He

had been transferred there from his work at Maghull hospital for shell-shocked. (For further information about him see the entry in this Encyclopedia for "Rivers, William Halse:"

Other staff included Arthur John Brock, an Edinburgh clinician and medical historian who had prior experience in treating 'neurasthenia' before the war. Brock was of the opinion that shell shock was not restricted to being a war time phenomenon. He felt it was an 'acute manifestation of a chronic condition' (Brock Arthur John. The Re-Education of the Adult: The Neurasthenic In war and Peace. *Sociol Rev*1918; X:25 -41 partially visible online at: http://onlinelibrary.wiley.com/doi/10.1111/j.1467-954X.1918.tb01309.x/abstract, available from Google Play at: https://books.google.ca/books/about/The_Re_education_of_the_Adult.html?id=3MYnnQEACAAJ&redir_esc=y.)

He advocated for treating the patient by encouraging useful functioning so as to improve their immediate environment for themselves and for those around them.

For a short study of Brock's approach to the treatment of shell shock and neurasthenia during WWI see: *The Hydra*, Captain AJ Brock and the Treatment of Shell-Shock in Edinburgh, AM Cross-man available online at: http://www.rcpe.ac.uk/journal/issue/journal_33_2/7_the_hydra.pdf. For a book by Brock see: Brock A. Health and Conduct. London: Williams and Norgate, 1923.)

Another doctor at Craiglockhart was William Brown.

Brown's theories:

Brown wrote:

"WHILE in charge of an advanced neurological centre in France during the period November, 1916-February, 1918, I have had to deal with between two and three thousand cases of psychoneurosis (neurasthenia, hysteria, and psychasthenia), and in the following paragraphs I will endeavour to give, in broad outline, a general view of the methods of treatment which have seemed to be most useful, and a statement of certain statistical results. The great majority of cases came under my care within 48 hours of their breakdown, and I was able to return 70 per cent. of them to the line after an average of a fortnight's rest and treatment in hospital; of course, certain individual cases needed a longer rest in hospital, up to two or three months. I feel sure that this success was due more often to prevention than to cure. By seeing so many of these light cases so early I was

able to prevent the development of further hysterical or pithiatic [sic] symptoms which would otherwise have taken place."

Brown wrote a section entitled: *"Essential Factors in Causation and Treatment."* It states: *"*It is important that the patient should have the benefit of a thorough examination of his nervous system at the earliest possible moment after the shock of the shell explosion. The incipient functional symptoms from which he is suffering make him fear, vaguely or definitely, that he has sustained some organic injury of the nervous system. This fear encourages the further development of such symptoms. It and its effects can be brought to an end by the reassuring remarks of the neurologist, after he has completed his examination. But those remarks must be repeated and forced upon the patient's notice. Especially is it the note of certainty in the doctor's voice which carries conviction. By one means or another the patient must be completely convinced of the truth of the doctor's explanation of his symptoms, and of the promise that they will quickly disappear. This conviction must pass beyond the stage of mere intellectual awareness and acceptance, and acquire the dynamism of strong emotion. Enthusiastic expectation of a rapid recovery is another essential condition of success, just as it was an earlier apprehension which was responsible for the development of the symptoms. This is more than mere suggestion and counter-suggestion. The mechanical processes of auto- and hetero-suggestion do certainly come into play in the fixation of the symptoms and in their later development and multiplication. But the origin of the symptoms (tremors, difficulties of speech and locomotion, profuse sweating, headaches, diminution or loss of various forms of sensation, &c.) is to be found in the intense , emotion of fear caused by the shell explosion, of which they are the objective physical manifestations. In like manner, ' although counter-suggestion plays its part in the cure of these functional symptoms, the factors which are of very much greater efficacy and importance in bringing about a permanent cure are : (1) persuasion, whereby the patient is 1 rationally convinced of the true nature of his symptoms ; and (2) the sthenic [sic] emotions of confidence, conviction, and expectation, which have a unifying effect upon the mind, and counteract the disintegrating effect of mechanical suggestion. It will thus be seen that I adhere to Dejerine's theory of the pathogeny of the psychoneuroses in preference to that of Babinski. As regards the period of meditation which - often elapses between the occurrence of the emotional shock and the onset of the earliest symptoms, I would also follow Dejerine in holding that it is a period of subconscious emotional development. Babinski and his followers believe that it is a period during which auto- and hetero-suggestion cooperate to bring about the

ultimate outbreak of the symptoms. The original shock, no doubt, produces some weakening of mental synthesis, although outwardly the patient does not appear greatly disturbed. (The treatment of cases of shell shock in an Advanced neurological centre. William Brown, O.C. Craiglockhart War Hospital. *The Lancet,* Volume 192, Issue 4955, 17 August 1918, Pages 197–200, partially visible online at:
http://www.sciencedirect.com/science/article/pii/S0140673600536769/part/first-page-pdf.)

Turmoil in Dottyville:

A year after it opened, there was a big shake up at Craiglockhart in October 1917 which involved a schism between the approach of the doctors working there and those in the War Office. The fight is very instructive.

Historically, any soldier that failed to perform his duties, for whatever reason, was considered a coward who was gaming the system to save their own skin. At times of war, it is understandable that military authorities needed to be fairly strict in such matters, because when one man steps back from the battlefield, others must take their place, or there is an increased risk of defeat at the hands of the enemy.

Similar disputes have raged ever since over how to treat patients who are dysfunctional and claim to be disabled, but for which standard tests fail to verify their problem. We see this in peacetimes as insurers and employers seek ways to keep fibromyalgia and chronic fatigue patients in the workforce.

Here is some relevant material based on the article entitled: 'Dottyville'—Craiglockhart War Hospital and shell-shock treatment in the First World War, by Thomas E F Webb. *J R Soc Med*. 2006 Jul; 99(7): 342–346, available in full online at:
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1484566/.)

Major Bryce was fired by the War Office. His loyal staff resigned in solidarity. He was replaced by a disciplinarian named Colonel Balfour Graham

The War Office held the traditional view that "shell shock sufferers were 'lead-swingers' and malingerers who should be treated in an appropriately punitive fashion and not sent on holiday in the Scottish countryside."

Sassoon wrote: "After the War Rivers told me that the local Director of Medical Services nourished a deep-rooted prejudice against [Craiglockhart], and actually asserted that he "never had

and never would recognize the existence of such a thing as shell-shock". (Sassoon Siegfried. *Sherston's Progress*. London: Faber & Faber, 1936. This is cited by Webb.)

Webb writes: "The next stage in the hospital's history saw the instigation of an unsympathetic and disciplinarian regime under Major Bryce's successor, Colonel Balfour Graham. The only description we have of this time comes from the novel *England, Their England* by A G Macdonnell—who was a patient at the hospital from April 1918—due in part to a significant gap in the surviving copies of *The Hydra* for this period (Figure 1). Macdonnell describes a 'monster hydropathic' under the unfortunate control of a kind of sadistic homeopath who ran the hospital on strict disciplinarian lines."

For a video about Craiglockhart:

See: Neurasthenia at Craiglockhart, at:
https://www.youtube.com/watch?v=P0hrTxksCXM.
Also see: https://www.youtube.com/watch?v=XXo-3dNh7cE.

The British Shell Shock Physicians of WW1:

The effort in Britain end up recruiting a wave of enterprising war doctors who attend to the shell shock patients and multiple hospitals and field treatment facilities. As a group they wrote many books on their experience. Fortunately, many or perhaps even all of these books are readily available through Internet Archive.

Perhaps the most famous were Rivers, Morgan Holmes, Carmalt Jones, Yealland, Grafton Elliot Smith and Mott.

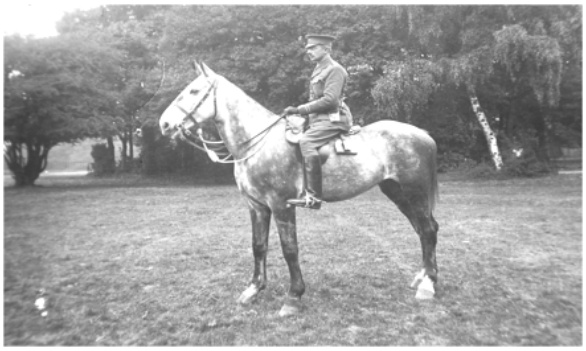
Soldier surgeons: Sir George Makins, Sir Gordon Morgan Holmes, Sir Percy Sargent and Wallace in Boulogne 1915.

Public domain image sourced from the Queen Square Library, Archive and Museum.

Symptoms and association with neurasthenia:

Wikipedia (2016)states that according to McLeod: "Some 60–80% of shell shock cases displayed acute neurasthenia, while 10% displayed what would now be termed symptoms of conversion disorder, including mutism and fugue." (Mcleod, A.D. "Shell shock, Gordon Holmes and the Great War" *J R Soc Med*. 2004 February; 97(2): 86–89.)" (https://en.wikipedia.org/wiki/Shell_shock.) For clarification of the symptoms see the entry in this Encyclopedia for "Neurasthenia:" Note that according to Baldwin and others there were many varieties of neurasthenia.

Dr. Carmalt Jones called shell shock "war-neurasthenia". He noted that it could be acute and chronic. During WWI he was the Medical Officer-in-charge of Medical Division, No. 4 of the Stationary Hospital, British Expeditionary force. This was a neurological centre. He said that "war neurasthenia" was 'a state of fatigue of the central nervous system, without organic change, manifested by asthenia, loss of physical and emotional control and disturbance of visceral functions'. (War-Neurasthenia, Acute and Chronic, DW Carmalt Jones, *Brain*, Part III, Volume 42, 1919 available in full online at: http://brain.oxfordjournals.org/content/136/6/1681.)



War neurasthenia physician, Dr. Carmalt Jones on horseback, 1914.

Public domain image.

He examined cases personally at a dedicated tent "within 2–3 days of onset, using a standard procedure that records demographic details, an assessment of 'personal nerve' and 'previous strain' (broadly, character and courage and any earlier stresses), the event that precipitated 'the shock', symptoms, and physical signs once the soldier has been stripped naked for examination. Abnormalities are classified as positive or negative: that is, for example, pain or anaesthesia when considering the sensory system; spasticity or paralysis with respect to motor function; and with a similar approach to splanchnic features. Patients are returned to the front within 1 month or sent to a base hospital if considered not fit for active service…" (Jones, 1919, cited by Compston)

"The demeanour of the patient is apathetic, reticent, emotional, tremulous and easily startled. Most complain of headache, dizziness, pain and paraesthesia, disturbed sleep, and altered digestion, bowel habit and micturition; the reflexes are brisk and the pupils dilated. Coordination is impaired with apparent tremor, loss of proprioception and altered balance…There are disorders of vision: blurring and scintillating coloured specks; diplopia often with convergence spasm; and lack of eye contact. Deafness, deaf-mutism and tinnitus are common, improving with re-education using 'bells, stethoscope and so on'. Stammering is frequent and there is a type of speech disturbance strongly suggestive of war-neurasthenia: low-pitched, slow and monotonous, with spaced syllables and full of gloom: 'I-don't-feel-much-better-this-morning' is typical parlance. Sometimes this is more severe and results in mutism, aphonia with whispered speech, and, rarely, aphasia. …Contraction, spasm and tics are rare; weakness and paralysis much more frequently observed. Almost by definition, there are no physical signs. Hysteria is a complication not the primary disorder and obviously present when there is anaesthesia, stupor or fits…" got to here "The visceral symptoms are no different in kind from those affecting somatic functions: dizziness, praecordial pain and palpitation with tachycardia; dyspnoea and tachypnoea; cold cyanosed extremities; dribbling and salivation; thirst with anorexia and constipation or diarrhoea; nocturnal frequency of micturition or, in others, retention of urine; and premature greying of the hair and baldness. Symptoms that Dr Carmalt Jones considers to be psychical include lack of concentration; inability to read because the words mean nothing; incapacity to write because of thought-block; loss of emotional control with crying, outbursts and impulses to murder and suicide (although no

such events have occurred); and hallucinations and bad dreams that contribute to the almost universal disorder of sleep. Some soldiers experience loss of memory. Lance-Corporal D, aged 20, is admitted on 14 March 1917 but can remember nothing since playing cricket in 1914. He has heard of Kitchener's army, but does not know that the General is dead; and is surprised to be told he is in France. Over the next 5 days he gradually recalls enlistment but not being fit for service in Gallipoli because of his nerves, subsequent arrival in Calais with a friend being killed by an explosion, and other injuries from bombings. Private N, admitted on 13 March 1917 in a semi-stuporose state having been in this condition for 2 weeks, remembers saying goodbye to his wife and child, and being a collier employed in an Admiralty pit but with no knowledge of France; with no subsequent signs of recovery, he is moved to a base hospital." (Jones, 1919 cited in Compston 2013)

Tented hospital, 4th Stationary Hospital, 31.7.1915.

Image sourced from National Archives, expired copyright.

Sourced from *Brain* article entitled "From The Archives" by Alastair Compston, *Brain* 2013: 136; 1681–1686 |available online at: http://brain.oxfordjournals.org/content/136/6/1681.

Carmalt Jones' distinction between acute and chronic war neuras-thenia:

"Those in whom the condition may have resulted from up to 2 years experience of war are classified as 'Chronic War-Neurasthenia'; the acute cases, attributable to a specific and recent event, often 'have superadded to it hysterical symptoms such as mutism and paralysis … [and are] … easily treated, although great sources of distress as long as they persist'. The 'ill-advised but now established term' shell-shock may occur with neurasthenia, 'or may form its starting point … [but] I prefer to regard it as Acute War-Neurasthenia'." 4700 cases attended the centre. (Jones, 1919, cited in Compston 2013)

Carmalt Jones' sample cases of shell shock/war neurasthenia:

Here is one of his cases: "'Sergeant H, aged 22; two years in France. Previous nerve good, played football for battalion, boxer; has done very well, done everything, lasted through Somme, wounded, promoted Sergeant, DCM. Suffering from general strain, no special explosion. For three months bad sleep, loss of concentration, worrying, losing flesh, irritable, avoids society, nothing to say, emotional, loss of self-confidence, formerly fond of risk'." (Jones, 1919 cited in Compston 2013)

Here is another one of his cases: The soldier "is considered a military misfit: 'Gunner M, aged 23; three months in France. Nerve poor. No good on guns, upset by own fire; no shock, reported sick with nerves and loss of sleep'." (Jones, 1919)

Here is his Case 19: "'Knocked out by trench mortar shell, unconscious more than an hour; later, mute for three days, stammering for two days'." (Jones, 1919 cited in Compston 2013)

Nightmares during shell shock:

Rivers stated: "The character of the dreams of soldiers shows that they are imbued with terror or horror, sometimes with both." (Page 121)
https://archive.org/stream/warneurosesshell00mott#page/118/mode/2up. For the full text version see:
https://archive.org/stream/warneurosesshell00mott/warneurosesshell00mott_djvu.txt.

Rivers also stated: "Terror is more self-regarding; horror is more altruistic. Both sentiments are based upon the primitive emotion of fear." Page 121

Fred Mott published a book just after WWI on his experiences with patients that had suffered shell shock. (*War neuroses and shell shock.* Fred K. W. Mott, Henry Frowde, Oxford University Press, 1919 available in full online at**:**
https://archive.org/details/warneurosesshell00mott and in full text at:
https://archive.org/stream/warneurosesshell00mott/warneurosesshell00mott_djvu.txt.)

In this book he had a section entitled "Dreams in relation to neurasthenia of Soldiers. (Page 119
https://archive.org/stream/warneurosesshell00mott#page/119/mode/1up.) where he stated:)

"As I have frequently observed, the persistence of terrifying dreams, often of one particular horrible experience recurring with great frequency, and even in the half- waking state persisting in the mind, proves that the struggle is going on. Indeed, *experience shows that while these dreams persist the other signs of neurasthenia exist*. *Indeed, a prognosis of recovery largely depends upon whether the patient has refreshing sleep, undisturbed by these terrifying dreams.* We may assume that these dreams cause a state of continuous emotivity.

Indeed, Dejerine points out that the dream can even, in some cases, cause an emotivity if it introduces into consciousness images sufficiently vivid to be considered as an emotive excitation, and when persistent and terrifying as it is in the case of soldiers suffering with war psycho- neuroses, an acquired emotivity may be engendered in a
neuro-potentially sound individual." (Italics have been added after the fact for emphasis.)
[Author's comments: Mott has made an interesting observation whereby he suggests that patients suffering post-traumatic neurasthenia must rebuilding their sleep and overcome the recurrent bad dreams in order to recover. It is now well established that improving one's sleep is critical to recovery from fibromyalgia. Further research is needed to test the hypothesis that bad dreams are causal for neurasthenia. The closest modern equivalent for neurasthenia might be "chronic fatigue syndrome—fibromyalgia spectrum."

Mott has another section entitled: `
"Emotional and Commotional Shock in Relation to Soldiers' Dreams". In it he states:

"In a general way emotion is a reaction of the personality. Under intense emotional shock an individual may be deprived of even elemental perceptions; not seeing any more, not hearing any more, not feeling any more, transformed into a simple automaton, the subject, as Dejerine

says, is, so to speak, in a state of psychological syncope. Soldiers under shell fire may become for the time being mere automata, and wander away unconscious of what they have been doing; it is difficult to decide whether they are suffering from emotional shock or from commotional shock without visible injury caused by forces generated by high explosives.

The emotional shock may be the result of terror or horror, and one must differentiate between these two forms of contemplative fear, in both of which the imagination plays an all-important part.

Sir Charles Bell says: 'Horror differs both from fear and terror, although more nearly allied to the last than the first. It is superior to both in this, that it is less imbued with personal alarm. It is more full of sympathy with the sufferings of others than engaged with our own. We are struck with horror even at the spectacle of artificial distress, but it is peculiarly excited by the real danger or pain of another. Horror is full of energy; the body is in the utmost tension, not unnerved by fear.'"

Nightmares of shell-shocked soldiers at Craiglockhart:

Nightmares are a critical symptom of PTSD. Not surprisingly they occurred in the shell-shocked soldiers of Craiglockhart. We get a glimpse into this aspect of war trauma when we delve into the illustrations of the soldier's magazines and their poems.

Illustration form *The Hydra*, the magazine of the Craiglockhart Hospital during WWI largely for victims of shell shock.

Public Domain image found in The First World War Poetry Digital Archive.

The image shows a man that has awakened from a nightmare. A shell seems to be coming right for him. Such shells traumatized many soldiers in WWI. Demonic ghost like figures surround him. He is terrified. (The image can be accessed at: http://www.oucs.ox.ac.uk/ww1lit/db/document.php?CISOROOT=/ww1&CISOPTR=5627&CISOSHOW=5323&DMSCALE=50&DMWIDTH=600&DMHEIGHT=600&DMX=0&DMY=78&DMMODE=viewer&DMTEXT=&REC=1&DMTHUMB=1&DMROTATE=0)

Theories of shell shock:

These are theories as to the cause of shell shock.

Carmalt Jones' comments on the cause of shell shock/war neuras-thenia:

He stated: "The aetiology is not mysterious. War-neurasthenia represents yielding to physical and emotional strain. Extreme youth is a predisposing factor. Those who have worked underground in civilian life may be less at risk. Paradoxically, soldiers who consider themselves to have 'nerve' are slightly over-represented amongst cases. Since duration of exposure is not a discriminating factor, risk depends more on a man's individual qualities than his circumstances, 'heredity being more relevant than environment'." (Jones, 1919 cited in Compston 2013)

He summarized his ideas as to the cause of shell shock by saying: "The exciting causes are therefore physical fatigue, physical violence and emotional strain."

A well-known English phrase is "He lost his nerve." It means that the person has lost their courage to take on a challenge. Perhaps it his origins with ideas about shell shock. For example, during WWI, Dr. Carmalt Jones said: "Simply stated, if the word 'nerve' expresses a personality with the facility to resist emotional strain, 'neurasthenia' or 'weakness of nerve' defines the condition found when that capacity is exhausted. For Dr Carmalt Jones, any derogatory implications of the diagnosis are to be resisted for 'neurasthenia honestly acquired on service'." (Jones, 1919 cited in Compston 2013)

Note that the word "neurasthenia" had a long history prior to the time of Carmalt Jones, and he may have been reading in some connotations to it. For further information see the entry in this *Encyclopedia* for "Neurasthenia" which has a subsection called: "History of the idea of neurasthenia:")

Rivers' theory of shell shock:

During WWI shell shock affected an estimated 7-10 percent of officers and 3-4% of other ranks. Rivers served at Craiglockhart where he gained considerable experience with shell shock patients. His theory of shell shock was that "war neuroses did not result from war experiences

themselves, but were ‘due to the attempt to banish distressing memories from the mind”. He encouraged his patients to remember, instead of trying to forget what they had been through: a precursor of abreaction therapy. On 4th December 1917, he addressed the Section of Psychiatry of the Royal Society of Medicine on the ‘Repression of War Experience’. In February 1918, this paper was published in *The Lancet* and it is available in full online at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2066211/pdf/procrsmed01153-0005.pdf.

This paper includes cases histories of anxiety neurosis and nightmares of war. It does not mention chronic pain patients. It shows a strong interest in psychoanalytic concepts such as repression and splitting. One of the commentators was Ernest Jones, Freud’s biographer.

Rivers wrote: “Because I advocate the facing of painful memories and deprecate the ostrich-like policy of attempting to banish them from the mind, it must not be thought that I recommend the concentration of the thoughts on just such memories. On the contrary, in my opinion it is just as harmful to dwell persistently upon painful memories or anticipations and brood upon feelings of regret and shame as to banish them wholly from the mind.”

W.H.R Rivers outside Craiglockhart during WWI.

Public domain image found in Wikimedia Commons
http://www.greatwar.nl/frames/default-riverspaper.html

For additional references on Rivers and shell shock:

An address on the repression of war experience. Rivers WHR. *Lancet* 1918; i: 173-177 available in full online at: http://www.gwpda.org/comment/rivers.htm

Instinct and the unconscious: a contribution to a biological theory of the psycho-neuroses by W H R Rivers, Cambridge University Press, Cambridge, 1920, chap 4, available in full online at: https://archive.org/details/instinctunconsci00riveuoft.

Therapeutic personality of Rivers at Craiglockhart:

Rivers was by all accounts a special person. (Here is what the great Henry Head said about him in his 'Appreciation', June 1922, the *British Medical Journal* *http://www.bmj.com/content/1/3207/977*, "No mere recital of the events of his life, the posts he held…is capable of doing justice" to a person like this.

FJ Robinson has built a website dedicated to the life of Rivers. (http://whrrivers.info/) In it he tried to piece together the elements of his personality which gave him his special therapeutic influence. We do not know that it all had positive impact on his patients, but we do know they were generally very fond of them. Psychiatrists have been for being over-focused on juggling medications. Cynics say that patients are sometimes looked upon as a chemistry set and their complex mental problems are too often reformulated and reduced to "chemical imbalances".

Here is Robinson's account of Rivers with italics added for emphasis: "From what a person can gather, however, it appears Rivers was greatly appreciated by his patients, for his approach to both their illness and life itself: Bartlett tried to explain: "there is really no word for this. *Sympathy is not good enough. It was a sort of power of getting into another man's life and treating it as if it were his own*."

Robinson writes: "Craiglockhart was not an easy post but Rivers seemed to thrive. He was at last doing the work that he came to feel he was born to do; stammer, caring eccentricities, curiousness and disregard for unfair authority seemed to come together in *gaining trust from his patients*. Many of his charges would later recall a *father-figure* (Sassoon even called him his '*Father Confessor'*) who would *listen to their fears without ridicule* and who would *make each person feel important in their own right*, without standing any nonsense. Lt William Evans* wrote of other features of Rivers' personality; that he never 'spoke down' to them, and was ever willing

to join in or take a joke – that, equally important but less documented, he 'had a quick, *dry sense of humour* that would always seem far ahead of our own. By the time we thought of an answer, he'd be ready with the next line. If you were lucky you got to spot the mischief hidden in his eyes. I used to enjoy those verbal sparring matches and, I think, so did he.' Since so much of society shunned these men and gave them a feeling of inferiority because they had broken down, this was all a great boost to their confidence, particularly because none of it was artificial." (Rivers the Healer, *W H R Rivers; Biography and Essays*, available online at: http://whrrivers.info/my-real-lifes-work-sassoon-and-yealland/.)

Grafton Elliot Smith's theory of shell shock:

According to Grafton Elliot Smith, shell shock is "all those mental effects of war experience which are sufficient to incapacitate a man from the performance of his military duties. The term is vague; perhaps its use implies too much; but this is not altogether a disadvantage, for never in the history of mankind have the stresses and strains laid upon body and mind been so great or so numerous as in the present war." (Pages 1-2, *Shell Shock and its Lessons*; Smith, Grafton Elliot, Sir; Pear, Tom Hatherley, Manchester University Press; London, 1917 available online at:
https://archive.org/stream/shellshockitsles00smitiala#page/n5/mode/2up and in full text mode at:
https://archive.org/stream/shellshockitsles00smitiala/shellshockitsles00smitiala_djvu.txt
.)

He noted that shell shock involves "nervous breakdown" sometimes "complicated by gas poisoning and a bullet wound". (Page 2) While it may be true that immediately after trauma the victim is irrational or has "lost his senses", this resolves by the time the patient gets to the hospital in England at which point "his reason and his senses are usually not lost but functioning with painful efficiency." (page 2) "Yet such combinations as these or worse are to be met with in the hospitals every day. " (page 2)

As examples of the inciting traumas he gives: "mine explosion, the burial in the dug-out, the sight and sound of his lacerated comrades, or other appalling experiences which finally incapacitate him for service in the firing line". (page 2)

Guilt and self-blame often occur. Grafton Elliot Smith puts it as follows: “His reason tells him quite correctly, and far too often for his personal comfort, that had he not given,' or failed to carry out, a particular order, certain disastrous and memory-haunting results might not have happened. It tells him, quite convincingly, that in his present state he is not as other men are. Again, the patient reasons, quite logically, but often from false premises, that since he is showing certain symptoms which he has always been taught to associate with ‘madmen,’ he is mad too, or on the way to insanity. If nobody is available to receive this man's confidence, to knock away the false foundations of his belief, to bring the whole structure of his nightmare clattering about his ears, and finally, to help him to rebuild for himself (not merely to re- construct for him) a new and enlightened outlook on his future in short, if he is left alone, told to ‘cheer up’ or unwisely isolated, it may be his reason, rather than the lack of it, which will prove to be his enemy. And nobody who has observed the hyperaesthesia to noises and light in the nerve-hospital, nobody who has seen the effects upon the patients of a coal dropping unexpectedly out of the fire, will have much respect for the phrase, ‘lost his senses’. There exist, of course, cases of functional blindness, deafness, cutaneous anaesthesia and the rest, but the majority of the nerve patients show none of these disorders and recovery from them is often rapid.” (pages 2-3)

[Author’s comments: He is drawing attention to several known forms of hysteria which have also in the past been called “psychogenic blindness”, “psychogenic deafness” and “hysterical anaesthesia”, respectively. Note that all three involve one sensory system or another. This illustrates the idea that under extreme stress there are at least three sensory symptoms that can malfunction.

He highlights that in his experience there is a need for early emotional support to assist the patient in overcoming powerful self- doubts about their mental stability. There is ample room for these lessons in modern clinical practice. Empathic and skilled medical practitioners and other therapists do this naturally. When, for example a fibromyalgia patient is told that he or she has more than a dozen symptoms of sleep deprivation, it can give them hope and reassure them that they are not losing her mind and that if they could rebuild their sleep, then many of the symptoms are likely to resolve. Such advice can be powerful medicine because it gives the patient hope that there may be a path out of their misery.]

Grafton Elliot Smith described shell shock as a disturbance of “the emotional sphere” which is “characterised by instability and exaggeration of emotion”.

He wrote that since “every nerve-stricken soldier presents a case by itself. Slavish adherence by the physician to one of the classical names or labels used in diagnosis usually spells failure. The patient must be approached without prejudice, and the doctor who wishes to be of real help to him must make up his mind to examine and ponder over the sufferer's mental wounds with as much, nay, even more care and expenditure of time than would be given to physical injuries. *A mere cursory inspection in the course of the formal ward visit is a solemn farce, if it pretends to be a serious attempt to cure the mentally afflicted*.” (pages 3-4, Italics added after the fact for emphasis.)

[Author’s comment: Modern doctors can take another lesson from him here. Medicine can be mechanistic, especially when doctors examine for known cut and try patterns and are not open to the uniqueness of each patient, especially in matters that are psychological.]

He noted that patients often have insomnia and that they can be witnessed as “sleeping badly” the character of which has an “exceedingly intimate and private nature”. (page 4)

He described the cases as having “immense complexity” (page 4) and as being “unusual mental conditions”. There is, in his view an “absolute necessity of obtaining and understanding the patient's past history, before and during the war. A dozen cases sent back from the front as shell-shock may prove to possess not a single feature in common except the fact of the shell explosion. And this, as has been pointed out, may be but the ‘last straw.’ The patient often discloses in the first interview the fact that he was displaying all his present symptoms before the arrival of the particular shell which laid him out.”

Grafton Elliot Smith’s sketched a “typical” shell shock case. It is not an actual case, but rather a composite created by him. It assumes a fit, trained soldier back from the notorious trenches of WWI. He has been exposed to intense repeated emotions including but not limited to “fear or of sympathy with suffering. He has had strong emotions in the trenches as well as: “general excitement, anxiety, remorse for major or minor errors, anger, elation, depression and that complex but very real state, the fear of being afraid.” (Page 6) “The soldier may be subjected to intense emotional stimuli of this kind for days or weeks without relief. And whereas to 'the mental sufferer in civil life sleep often is vouchsafed, ‘setting him on his feet’ to continue, more or less effectively, the struggle next day, to the soldier sleep may be impossible, not necessarily because of his excited mental state, but simply from the lack of opportunity or the disturbances going on about him. In course of time *'this loss of sleep from external causes may easily set up bodily and mental*

excitability, which in its turn acts as a further cause of insomnia. [Italics added after the fact for emphasis.] The usual mental conditions associated with loss of sleep then rapidly supervene: pains and unpleasant organic sensations, hyperaesthesia, irritability, emotional instability, inability to fix the attention successfully upon important matters for any length of time, loss of the power of inhibition and self-control." (page 6-7)

[Author's comments: This sounds very much like severe fibromyalgia. Note the multisystem nature of the condition: emotional, sleep, sensory and attentional elements are all present. He has also described rather eloquently a much-neglected topic in sleep medicine which is sometimes called "overtiredness" and he explains that agitation from it. It is paradoxical because the patient is very tired from lack of sleep yet too agitated to sleep. This is a clinically important vicious cycle.

He alludes to something proven by Moldofsky many years later which is the relationship between sleep deprivation and muscular pain in some patients. Note the multiple symptoms that he attributes to sleep deprivation which included emotional and attention problems.]

He continued: "These symptoms, troublesome enough in civil life, become positively dangerous to the man in the trenches, especially if he is in a position of responsibility. In that case his standing as officer or N.C.O. merely adds to his mental 'distress. Bodily hardship, such as exposure to cold and wet, hunger, and the irritation from vermin, obviously aggravates the disorders we have described."

He noted that some patients suppressed their fear and emotions and this was often demanded of the men in the trenches. He stated that "before this epoch of trench warfare very few people have been called upon to suppress fear continually for a very long period of time." This he said "accounts for the collapse, under the long continued strain of trench warfare, of men who have shown themselves repeatedly to be brave and trustworthy. They may have felt intense emotions, obviously not of fear alone, for a long time without displaying any signs of them. But suppression of emotion is a very exhausting process. As Bacon says, 'We know diseases of stoppings and suffocations are the most dangerous in the body; and it is not much otherwise in the mind.'"

Here is his description of trench warfare: [When reading it, it is best to try to visualize the physical conditions of being in a trench and living in the muck below ground while the enemy targets them. There was an ever-present danger to any solder that poked his head up to look out from the trench.]

"A man has seldom a personal enemy whom he can see and upon whom he can observe the effects of his attacks. His anger cannot be directed intensely night and day against a trench full of unseen men in the same way in which 1 it can be provoked by an attack upon him by an individual. And frequently the assaults made upon him nowadays are impersonal, undiscriminating and unpredictable, as in the case of heavy shelling. One natural way is forbidden him in which he might give vent to his pent-up emotion, by rushing out and charging the enemy. He is thus attacked from within and without. The noise of the bursting shells, the premonitory sounds of approaching missiles during exciting periods of waiting, and the sight of those injured in his vicinity whom he cannot help, all assail him, while at the same time he may be fighting desperately with himself. Finally, he may collapse when a shell bursts near him, though he need 'not necessarily have been injured by actual contact with particles of the bursting missile, earth thrown up by its impact, or gases emanating from its explosion. He may or may not be rendered unconscious at the time. He is removed from the trenches with loss of consciousness or in a dazed or delirious condition with twitchings, tremblings or absence of muscular power."

The shell shock psychotherapists of WWI:

The "shell shock psychotherapists" were a group of psychologically minded military doctors caring for British victims of shell shock in WW1.They included Halse Rivers, Grafton Elliot Smith and William Brown.

Sir Grafton Elliot Smith wrote: *Shell shock and its lessons,* published by Long-mans, Green & Co., London, 1917, available in full online at: https://archive.org/details/39002022350152.med.yale.edu and in full text at: https://archive.org/stream/39002022350152.med.yale.edu/39002022350152.med.yale.edu_djvu.txt

Professor William Brown wrote: *Psychology and Psychotherapy*. . Published by Edward Arnold, 1921 and available in full online at: https://archive.org/details/psychologyandpsy032419mbp, and also in full text at: https://archive.org/stream/psychologyandpsy032419mbp/psychologyandpsy032419mbp_djvu.txt

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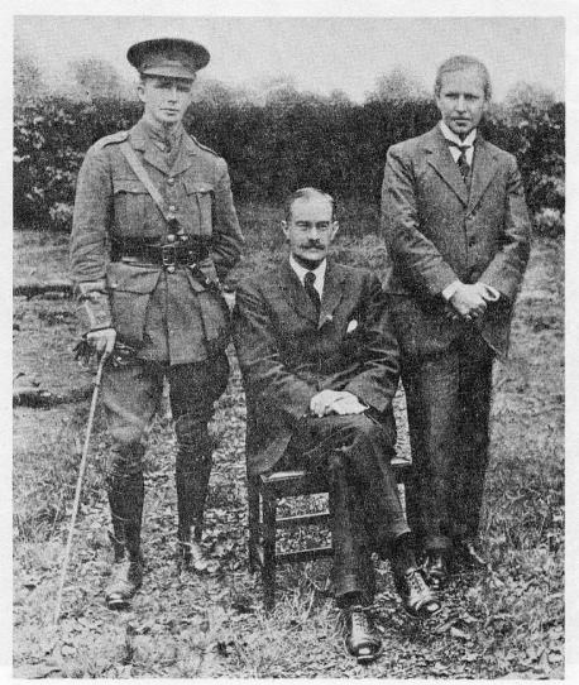


The Shell Shock Psychotherapists of WWI: William Brown, Halse Rivers and Grafton Elliott Smith, 1915 at the Military Hospital, Maghull.

Public domain image.

Yealland's treatments of shell shock and post-traumatic hysteria in WWI at Queen's Square:

Yealland was a physician who during WWI treated traumatized soldiers back from the horrors of the battlefield. He did this with a combination of demonstrations of bodily function, suggestions of improvement and electrical therapy. He claimed a high success; but this cannot be entirely verified. He documented his experience in a book. (See: *Hysterical Disorders of Warfare*, Yealland, Lewis R. (Lewis Ralph), Macmillan, London 1918 available online at: https://archive.org/details/hystericaldisord00yealuoft and in full text at: https://archive.org/stream/hystericaldisord00yealuoft/hystericaldisord00yealuoft_djvu.txt .) Decades later he was vilified. A thoughtful review of his approach was published by Linden et al. (Shell shock at Queen Square: Lewis Yealland 100 years on. Linden, Stefani C.; Jones, Edgar; Lees, Andrew J. (4 February 2013). *Brain* **136** (6): 1976–1988 available in full online at: http://www.kcl.ac.uk/kcmhr/publications/assetfiles/2013/Linden2013a.pdf.)

Lewis Yealland.

Public domain image

Wikipedia states: "Lewis Ralph Yealland (1884 – 2 March 1954) was a Canadian-born therapist who moved to the United Kingdom to practice medicine during the First World War and was at the forefront of experimental shock techniques to treat shell shock." The hospital in Queen Square admitted over 1,200 sailors and soldiers.

"The most common diagnoses of the time were functional disorder, hysteria, neurasthenia, neurosis and shell shock. More than 200 cases were treated by the neurologist Dr Lewis Yealland…" (First World War at the National,11 Sep 2014, https://www.uclh.nhs.uk/News/Pages/FirstWorldWarattheNational.aspx.)

An editorial from 1927 stated: "Very early in the war it was obvious that a new and pressing problem had arisen the problem of the 'nerve sick' soldier. This problem has no doubt been presented to all ages and to all civilisations, but it is doubtful whether its seriousness could have been forecasted. At the outbreak of war none knew what would be the effect of modern methods of fighting, of high explosives, or the prolonged state of what in effect were siege conditions. In any case, shortly after the Mons retreat the seriousness of the problem was realised and steps were taken to meet it." (Editorial. The end-results of the treatment of "Shell-shock". *J Neurol Psychopathol* 146-147, 1927 s1-8:/146.citation, available in full online at: http://jnnp.bmj.com/content/jnnp/s1-8/30/146.full.pdf, http://jnnp.bmj.com/content/s1-8/30. Cited in: *First World War at the National*, 11 Sep 2014.)

The following remarks give an overview of Yealland's work. It is from the preface to his book which was written by E. Farquhar Buzzard:

"His principle has been a straightforward one, and is based on the belief that a disorder originating in suggestion should yield to counter-suggestion, that the precise method of counter-suggestion is really immaterial so long as it is strong enough, and that the line of treatment must be varied according to the mental attitude of the patient. His success has proved that in skillful and determined hands the time-honoured employment of a faradic battery as an implement of suggestion is at least as efficacious as hypnosis or ether anaesthesia, and that resort to the latter alternatives, with their obvious disadvantages, is rarely, if ever, necessary.

It need scarcely be pointed out that this success does not depend on the implement, but on the personality of the medical man who employs it. The latter must possess sympathy, understanding, tact, imperturbable good temper and untiring determination, in addition to a sense of humour and the ability to meet unlooked for situations as they arise with ready decision." *Hysterical Disorders of Warfare.* Yealland, Lewis R. (Lewis Ralph); Buzzard, E. Farquhar (Edward Farquhar), Sir, 1871-1945, London: Macmillan 1918, available in full online at: https://archive.org/details/hystericaldisord00yealuoft, and in full text mode at: https://archive.org/stream/hystericaldisord00yealuoft/hystericaldisord00yealuoft_djvu.txt.)

Yealland applied the electrodes in some cases to the area of the hysterical symptoms. This seems short-sited because from anatomy we know that the areas controlling the body are in the central and peripheral nervous systems. In one notorious case he applied the electrodes to the throat area of a patient who seems to have had psychogenic mutism. Brush (2014) cited Tom Slevin's article, *The Wound and the First World War,* which describes this case. The patient was "Private M". "This soldier had lost his ability to speak after experiencing combat in the war. He had been in a series of 'horrific battles, including Mons, Marne, and Ypres.' Yealland strapped Private M to a chair, robbing him of the ability to move, and for twenty minutes at a time, would apply strong electric currents to his neck and throat. Paired with the electric currents, Yealland applied the treatment of lit cigarettes to the tip of the private's tongue and placed hot plates in the back of his mouth. Meanwhile, Yealland used "suggestive techniques to inscribe ideologies of duty, control, and masculinity," wrote Slevin. The private was eventually cured by this method after about an hour of treatment when he uttered a sound." (Shell shock: The culture of cowardice in the First

World War. Megan Brush, *Esprit de corps*, the Canadian military magazine, March 24, 2014, available online at: http://espritdecorps.ca/in-history/2014/3/24/shell-shock-the-culture-of-cowardice-in-the-first-world-war.)

From this description, the treatment sounded sadistic. At best, it seems disciplinary. The case still holds some interest because of the claim that the patient was cured. However, without long term follow up showing sustained benefits, the claim is rather hollow.

Here is an excerpt from Dr. E. Farquhar Buzzard's preface to Yealland's book in which he claims that hysteria is a result of suggestion and the proposed treatment is a form of counter-suggestion:

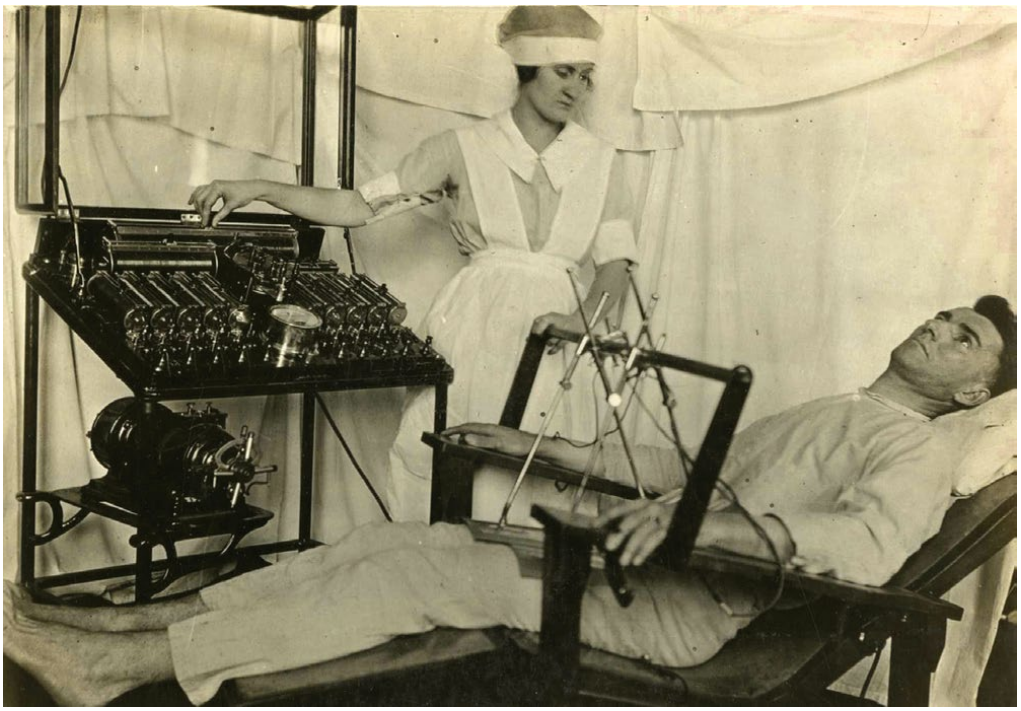
"He [Yealland] threw himself into the solution of this problem with characteristic energy, and soon realized that what may be called an intensive method of treatment gave better results than the more prolonged measures generally adopted.

His principle has been a straightforward one, and is based on the belief that a disorder originating in suggestion should yield to counter-suggestion, that the precise method of counter-suggestion is really immaterial so long as it is strong enough, and that the line of treatment must be varied according to the mental attitude of the patient. His success has proved that in skillful and determined hands the time-honored employment of a faradic battery as an implement of suggestion is at least as efficacious as hypnosis or ether anaesthesia, and that resort to the latter alternatives, with their obvious disadvantages, is rarely, if ever, necessary."

Something can be learned from Yealland. The situation is complex. He comes across as a young zealot. He was under pressure to perform. He may have been driven by ambition to be a great clinician. To further complicate matters, at least some, and perhaps even many of his patients got a least a dramatic temporary reprieve from their symptoms. Now a hundred years later we are still using established electrical treatments such as ECT for severe depression, and we have a new wave of transcranial electrical stimulators as well as numerous electrical stimulators for the body. We need to be vigilant that treatments with a magical aura about them are subjected to strict scientific validation so that magical thinking on the part of zealots can be kept at bay. (The other issue is this: Even if a treatment works by suggestion alone and is grounded in belief in the treatment, is it ethical to withhold it if not better treatment is available?)

Electrical shock treatments have physiological effects, but they are also quite theatrical in nature as the whole idea of being shocked nuance meanings such as "sudden attack to my body"

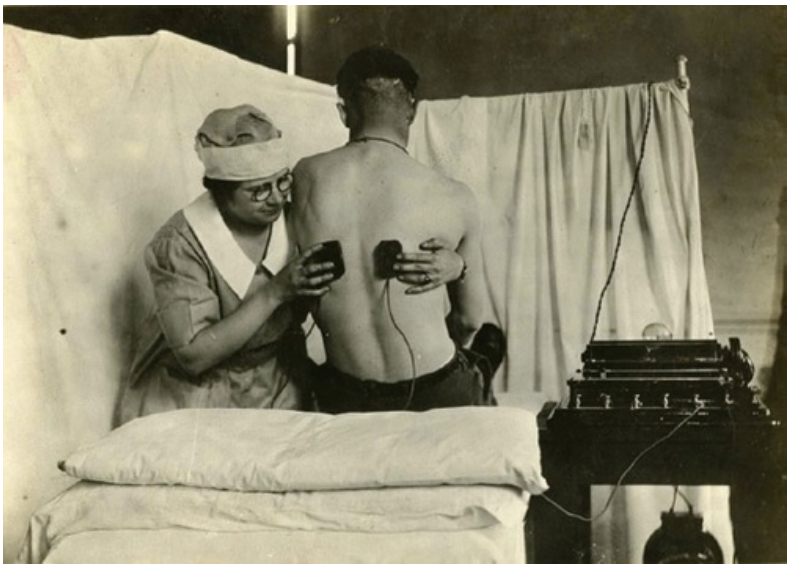
and “potential danger”. Hysteria is “ideogenic”. For example, in the hysterical anesthesias the defects follow idea about the body not sensory anatomy. Hence the idea that something dramatic has happen through an electrical shock might engender a magical “ideogenic cure”. In this respect it is a little like hypnotic suggestion of recovery which is also “ideogenic” in nature.



A shell-shocked soldier receives electrical shock treatment.

Public domain image from the Otis historical archives. (See http://www.medicalmuseum.mil/?p=collections.archives.index)

The image shows a patient in a Bergonic chair used in WWI. It was used for “psycho-neurotic cases”. A “general electric shock” was administered.



A nurse applies electrodes over the root of the splanchnic nerves "in splanchnoptosis to treat resultant cerebral anemia found in shell shock sufferers".

Public domain image from the Otis historical archives. (See http://www.medicalmuseum.mil/?p=collections.archives.index)

Historical note on shell shock victim and war poet Wilfred Owen:

Wilfred Owen was a hero who suffered shell shock. He was treated and returned to the battlefield. Despite his very short life, was one of the best known "war poets" of WWI. He was commissioned to be a second lieutenant with the Manchester Regiment in 1916. At the end of that year he was posted to France. The next month, he and his men came under heavy fire as a terrifying bombardment descended on them in a flooded dugout for 50 hours. Then, only two months later, in March he suffered concussion and spent time in hospital. By April he had returned to the front again where he was engaged in fierce fighting. He was hit by a shell blast at Savy Wood. He laid half-conscious in a shell crater along with the dismembered remains of a friend. While on parade, on the 30th April he appeared shaky. Then on the first of May he was diagnosed with shell shock and evacuated to England. He was then sent to the now famous Craiglockhart War Hospital in Edinburgh.

Wilfred Owen (1893-1918).

There he met another now famous war poet named Siegfried Sassoon who was also a patient there. “Owen was to gain immeasurably from the friendship which developed between them. Sassoon’s poetic voice, with its strong emphasis on realism, influenced Owen’s developing style, as the poems 'Dulce et Decorum Est' and 'Anthem for Doomed Youth' demonstrate. This realism and emphasis on experience also played a part in Owens’s therapy in Craiglockhart where Arthur Brock, Owens’s doctor, encouraged him to translate the experiences he had suffered into poetry.” (See: *The Wilfred Owen Collection*, by Stephanie Fishwick and edited by Stuart Lee which is part of the *First World War Poetry Digital Archive*, available online at: http://www.oucs.ox.ac.uk/ww1lit/collections/owen)

He left the hospital and rejoined his regiment at Scarborough in June 1918. He was a twenty-five-year-old officer. In August he was re-posted to France. He showed great bravery and leadership when during the attack on Joncourt on October 1 where he was involved in storming the enemy and turning the machine guns of the German’s against them. On the 4th of November 1918, while leading an attack by the Sambre Canal, near Ors, he was killed in action while still at the tender age of 25. He was awarded the Military Cross posthumously.

His case is interesting to help understand the effects of extreme stress. (It would be interesting to know if his medical records survived the war.) He must have had at least a partial recovery otherwise it is hard to imagine how he would have returned to the battlefield. Craiglockhart was an extraordinary place and much can be learned from the experience there to help clarify the modern quagmires of fibromyalgia and chronic fatigue syndrome. More study of his relationship with Brock may offer clues to cure.

For further information and perspective see:

Brock, Arthur John. The Re-Education of the Adult: The Neurasthenic In war and Peace. *Sociol Rev* 1918; X: 25-41 (see p. 30) 9. *The Hydra* at: www.hcu.ox.ac.uk/jtap/hydra.

For a short study of Brock's approach to the treatment of shell shock and neuras-thenia see: *The Hydra*, Captain AJ Brock and the Treatment of Shell-Shock in Edinburgh, AM Crossman available online at: http://www.rcpe.ac.uk/journal/issue/journal_33_2/7_the_hydra.pdf)

For information about Craiglockhart ("Dottyville") see: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1484566/ and also see: http://www.rcpe.ac.uk/journal/issue/journal_33_2/7_the_hydra.pdf

For biographies on Owen see:

Wilfred Owen: A Biography, by Stallworthy, J., Oxford University Press, Oxford, 1977, and

Wilfred Owen: A New Biography, by Hibberd, D. London: Weidenfeld & Nicol-son, 2002)

For a YouTube video called Regeneration depicting Owen's meeting of Sassoon at Craiglockhart see: https://www.youtube.com/watch?v=FuzRR3jVgS0.

War dreams in the poetry of Wilfred Owen:

The frightening dreams of traumatized soldiers were captured in the poems of the Wilfred Owen (1893-1918). He wrote the following famous poem in 1917 at Craiglockhart ("Dottyville") before returning to the battlefield where he was killed in action. It is entitled "*Dulce Et Decorum Est*":

[Italics added for emphasis to bring forward dream-related aspects of the poem.]

"Bent double, like old beggars under sacks, Knock-kneed, coughing like hags, we cursed through sludge, Till on the haunting flares we turned our backs And towards our distant rest began to trudge. Men marched asleep. Many had lost their boots But limped on, blood-shod. All went lame; all blind; Drunk with fatigue; deaf even to the hoots Of tired, outstripped Five-Nines that dropped behind.

Gas! Gas! Quick, boys!---An ecstasy of fumbling, Fitting the clumsy helmets just in time; But someone still was yelling out and stumbling, And flound'ring like a man in fire or lime... Dim, through the misty panes and thick green light, As under a green sea, I saw him drowning.

In all my dreams, before my helpless sight, He plunges at me, guttering, choking, drowning.

If in some smothering dreams you too could pace Behind the wagon that we flung him in, And watch the white eyes writhing in his face, His hanging face, like a devil's sick of sin; If you could hear, at every jolt, the blood Come gargling from the froth-corrupted lungs, Obscene as cancer, bitter as the cud Of vile, incurable sores on innocent tongues,--- My friend, you would not tell with such high zest To children ardent for some desperate glory, The old Lie: *Dulce et decorum est Pro patria mori*."

[This is a line from the Roman lyrical poet Horace's *Odes* (III.2.13). A rough translation is: "It is sweet and right to die for your country." (Wikipedia.) The poem was sourced online from: http://www.oucs.ox.ac.uk/ww1lit/collections/document/5215/4631.]

War dreams and battle dreams described by Rivers in *Conflict and Dreams:*

Rivers discussed what he called "war-dreams" and "battle-dreams" in his book *Conflict and Dreams* (See *Conflict and Dreams.* W. H. R. Rivers. (With a preface by another war-trauma psychotherapist, G. Elliot Smith.) Published by K. Paul, Trench, Trubner & co., Ltd.; New York : Harcourt, Brace & company London,1923 available in full online at: https://archive.org/details/conflictanddream032366mbp and in full text at: https://archive.org/stream/conflictanddream032366mbp/conflictanddream032366mbp_djvu.txt.) He wrote:

"A feature of the war-dream, and of other adult nightmares, is the exaggerated character of the fear experienced, this exaggeration being again a character of infancy and childhood. There is little doubt that infancy and childhood form a period of life in which the human being is liable to affective disturbances of a very intense kind with the crude explosive nature which is characteristic of the affect of the nightmare or war-dream.

Still another feature of the war-dream, and probably also of the adult nightmare in general, is of special significance. The affective disturbance is described as having a peculiar quality unlike any experience of adult waking life, or only paralleled by the gusts of un-reasoning terror which are also liable occasionally to overwhelm sufferers from certain forms of psycho-neurosis. It is not, of course, possible to say that this quality which seems so peculiar and strange to the adult is a regression to a quality of the fears of childhood, but this is at least possible.

I suggest, therefore, that the nightmare and the war-dream are themselves examples of infantile states, that they are occurrences of the sleep of adults which appear in a form characteristic of infancy.

If now we pass to the stage of the war-dream in which transformation appears, one of the most frequent forms in which this transformation shows itself in my experience is that terrifying animals take the place of the incidents of warfare which have hitherto formed the exclusive content of the dream. There is little question that animals are prominent in the terrifying dreams of childhood, and their occurrence in the transformed war-dream may thus be regarded as another example of regression. Some of my patients remembered having had similar dreams in childhood, while in one case in which the terrifying image was a Chinaman, the dreamer distinctly recollected its occurrence in the dreams of his childhood. The images utilised in these examples of transformation were characteristic of an early period of life.

The examination of the nightmare and war-dream thus shows that they possess, though in a different way, a character which I have ascribed to dreams of the more ordinary kind. The nightmare and the war-dream share with dreams of other kinds the feature that they are occurrences in which experience finds expression in sleep in a form characteristic of infancy or of periods of life earlier than that of the occurrence of the dream. While it is not possible to regard all dreams either as wish-fulfilments or as successful solutions of conflicts, it is possible to bring them all into the category of regression, of throwing back in sleep to modes of mental activity and expression characteristic of earlier periods of life.

While the pure battle-dream thus differs from the general run of dreams in respect of transformation, it falls into line with the rest with regard to the infantile form in which the affect finds expression. The infantile character gives a broader basis for classification than is afforded by the process of transformation. This being so, let us inquire how far this infantile character is capable of explaining, or at least of illustrating, the relation of the affect to the dream."

A case history by Rivers of anxiety neurosis following war trauma:

Here is a case history of anxiety neurosis following war trauma which was treated by Rivers:

“The first case is that of a young officer who was sent home from France on account of a wound received just as he was extricating himself from a mass of earth in which he had been buried. When he reached hospital in England he was nervous and suffered from disturbed sleep and loss of appetite. When his wound had healed, he was sent home on leave where his nervous symptoms became more pronounced, so that at his next board his leave was extended. He was for a time an out-patient at a London hospital and was then sent to a convalescent home in the country. Here he continued to sleep badly, with disturbing dreams of warfare, and became very anxious about himself and his prospects of recovery. Thinking he might improve if he rejoined his battalion, he made so light of his condition at his next medical board that he was on the point of being returned to duty when special inquiries about his sleep led to his being sent to Craiglockhart War Hospital for further observation and treatment.

On admission he reported that it always took him long to get to sleep at night and that when he succeeded he had vivid dreams of warfare. He could not sleep without a light in his room because in the dark his attention was attracted by every sound. He had been advised by everyone he had consulted, whether medical or lay, that he ought to banish all unpleasant and disturbing thoughts from this mind. He had been occupying himself for every hour of the day in order to follow this advice and had succeeded in restraining his memories and anxieties during the day, but as soon as he went to bed they would crowd upon him and race through his mind hour after hour, so the every night he dreaded to go to bed.

When he had recounted his symptoms and told me about his method of dealing with his disturbing thoughts, I asked him to tell me candidly his own opinion concerning the possibility of keeping these obtrusive visitors from his mind. He said at once that it was obvious to him that memories such as those, he had brought with him from the war could never be forgotten. Nevertheless, since he had been told by everyone that it was his duty to forget them he had done his utmost in this direction. I then told the patient my own views concerning the nature and treatment of his state. I agreed with him that such memories could not be expected to disappear from the mind and advised him no longer to try to banish them but that he should see whether it was not possible to make them into tolerable, if not even pleasant, companions instead of evil influences which forced themselves upon his mind whenever the silence and inactivity of the night came round. The possibility of such a line of treatment had never previously occurred to him, but

my plan seemed reasonable and he promised to give it a trial. We talked about his war experiences and his anxieties, and following this he had the best night he had had for five months.

During the following week he had a good deal of difficulty in sleeping, but his sleeplessness no longer had the painful and distressing quality which had been previously given to it by the intrusion of painful thoughts of warfare. In so far as unpleasant thoughts came to him, these were concerned with domestic anxieties rather than with the memories of war, and even these no longer gave rise to the dread which had previously troubled him. His general health improved; his power of sleeping gradually increased and he was able after a time to return to duty, not in the hope that this duty might help him to forget, but with some degree of confidence that he was really fit for it.

The case I have just narrated is a straightforward example of anxiety neurosis, which made no real progress as long as the patient tried to keep out of his mind the painful memories and anxieties which had been aroused in his mind by reflection on his past experience, his present state, and the chance of his fitness for duty in the future. When in place of running away from these unpleasant thoughts he faced them boldly and allowed his mind to dwell on them in the day they no longer raced through his thoughts at night and disturbed his sleep by terrifying dreams of warfare." (The repression of war experience, WHR Rivers, Dec. 4th, 1917, available in full online at:
https://web.viu.ca/davies/H324War/Repression.war.experience.1918.htm.)

For additional material about war dreams by Rivers see: Two Addresses ON WAR PSYCHO-NEUROSIS.1 (II.) The psychology of soldiers' dreams. *The Lancet,* February, 2, 1918 partially visible online at: http://www.sciencedirect.com/science/article/pii/S0140673601232322
http://libguides.mssm.edu/ejournals/.
For access to archives of the Lancet see:
http://levymssm.typepad.com/levy_library/2010/12/the-lancets-complete-digital-archive-now-available-from-levy-library.html
http://libguides.mssm.edu/ejournals

Portrait of Captain WHR Rivers, in uniform, during the years of WWI, by D.G. Shields

Public domain image.

Sassoon, another great war poet who emerged from Craiglockhart:

Among Rivers' patients were two of the greatest war poets of WWI, Siegfried Sassoon (1886–1967) and Wilfred Owen (1893–1918). Sassoon appears in Rivers' work on shell shock while Rivers appears in several poems written by Sassoon after World War I. Sassoon's fictionalized autobiography, *The Complete Memoirs of George Sherston* (1980), extols him almost as a demigod who saved his life and soul. Sassoon referred to Dottyville in Sherston's *Progress* as 'that Mecca of psycho-neuroses". In his preface to *Medicine, Magic and Religion*, (Rivers W H R, London: Kegan Paul; New York: Harcourt, 1924 available online from Google Books at: https://books.google.ca/books?id=vaOGAgAAQBAJ&printsec=frontcover#v=onepage&q&f=false.)

2nd Lt Siegfried Sassoon, in 1917.

Public domain image.

Sassoon wrote: “I would very much like to meet Rivers in the next life. It is difficult to believe that such a man as he could be extinguished.”

Sassoon nicknamed the Craiglockhart hospital as “Dottyville” in a letter in 1917. It was mentioned in his memoirs. Dottyville was also mentioned in a stage play, and Pat Barker's fine novels, The *Regeneration Trilogy* as well as in a film version of the first of these novels.

Forms
I. 1237
12

Admitted Craiglockhart War Hospital, 23/7/17.

Army Form I. 1237.

MEDICAL CASE SHEET.*

No. in Admission and Discharge Book.	Regimental No.	Rank.	Surname.	Christian Name.
327 T. (F)		2nd Lieut.	Sassoon	Siegfried.
Year		Unit.	Age.	Service.
1917		R.W.F.	30	2 11/12

Station and Date.

Craiglockhart War Hospital, 23/7/17

Disease

Patient joined ranks of the Sussex Yeomanry on Aug. 3rd, 1914. Three months later he had a bad smash when schooling a horse, and was laid up for several months. In May 1915 he received a commission in the Royal Welsh Fusiliers. He was in France from Nov. 1915 until Aug. 1916, when he was sent home with trench fever. He had received the Military Cross in June 1916. He was on three months' sick leave and returned to France in Feb. 1917. On April 16th, 1917, he was wounded in the right shoulder and was in the surgical wards of the 4th London for four weeks and then at Lady Brassey's Convalescent Home for three weeks. He then understood that he was to be sent to Cambridge to instruct Cadets.

From an early stage of his service in France, he had been horrified by the slaughter and had come to doubt whether the continuance of the War was justifiable. When on sick leave in 1916 he was in communication with Bertram Russell and other pacifists. He had never previously approved of pacifism and does not think that he was influenced by this communication. During his second visit to France, his doubts about the justifiability of the War were accentuated; he became perhaps even more doubtful about the way in which the War was being conducted from a military point of view. When he became fit to return to duty in July of this year, he felt that he was unable to do so, and that it was his duty to make some kind of protest. He drew up a statement which he himself regarded as an act of wilful defiance of military

(2)

*The first and last entries will be signed, and transfers from one Medical Officer to another, attested by their signatures.

(44503) Wt.W 11360—M 1150. 1,450,000. 6/16. C.F.A.S. Forms/I. 1237/16. (E338)

P.T.O.

authority : (See Times, July 31st, 1917). In consequence of this statement he was ordered to attend a Medical Board at Chester about July 16th, but refused. It was arranged that a second Board should be held at Liverpool on July 20th, which he attended, and he was recommended for admission to Craiglockhart War Hospital for special treatment for three months.

The patient is a healthy-looking man of good physique. There are no physical signs of any disorder of the Nervous System. He discusses his recent actions and their motives in a perfectly intelligent and rational way, and there is no evidence of any excitement or depression. He recognises that his views of warfare is tinged by his feelings about the death of friends and of the men who were under his command in France. At the present time he lays special stress on the hopelessness of any decision in the War as it is now being conducted, but he left out any reference to this aspect of his opinions in the statement which he sent to his Commanding Officer and which was read in the House of Commons. His view differs strikingly from that of the ordinary pacifist in that he would no longer object to the continuance of the War if he saw any reasonable prospect of a rapid decision.

He had an attack of double pneumonia when 11 years old, (8½) and again at 14. (15½) He was at Marlborough College, where he strained his heart at football. He was for four terms at Clare College, Cambridge, where he read first Law and then History, but did not care for either subject. He left Cambridge and spent the following years living in the country, devoting his time chiefly to hunting and cricket. He took no interest in Politics. From boyhood he has written verses at different times, and during his convalescence from his riding accident in 1914 he wrote a poem called "The Old Huntsman" which has recently been published with other poems under that title.

J.R.R. Tolkien

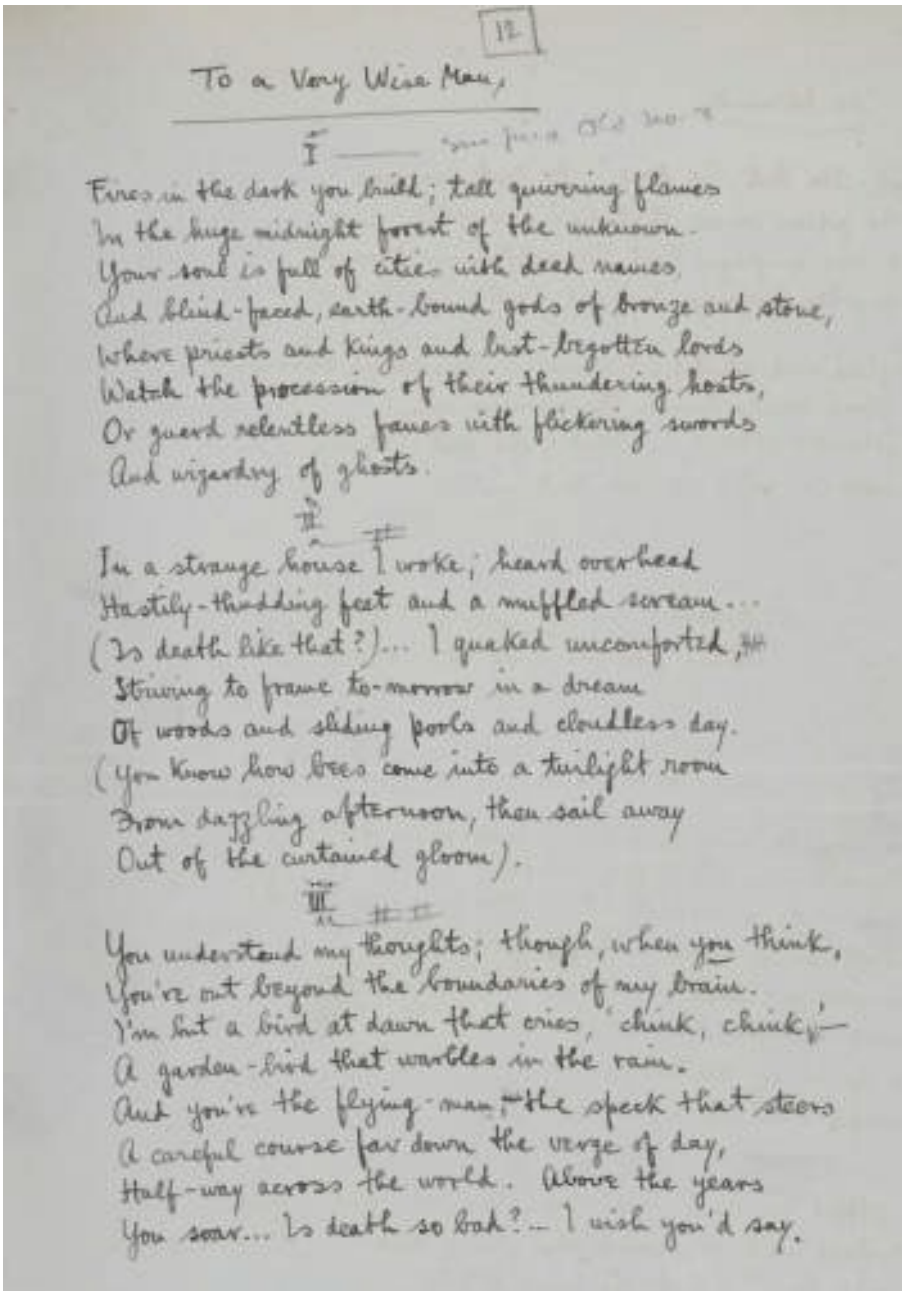
Siegfried Sassoon's medical case-sheet from Craiglockhart War Hospital. 23 July 1917.

Public domain document, IWM Ref: P444 from the Imperial War Museum Archives.

This was written by Dr. W H R Rivers. It details the early military career of Sassoon as well as the background to his famous reservations against continuation of the war. Sassoon served on the Western Front. He received the Military Cross in June 1916 and earning the nickname 'Mad Jack' for his daring exploits in action.

The description of the document reads: "While in Britain convalescing from a shoulder wound, Sassoon's discontent with the course of the war became pronounced, and in July 1917 he issued a public declaration of his belief that the war was being deliberately prolonged by those who had the power to end it. Narrowly avoiding a military court martial through the intervention of his friend Robert Graves, the authorities decided that Sassoon's behaviour was a direct result of neurasthenia ('shell shock'). He was ordered to Craiglockhart War Hospital in Edinburgh where he was placed under the psychiatric treatment of Dr. W H R Rivers. Disheartened by the ineffectiveness of his protest, Sassoon became convinced that he should return to his regiment in France, and sympathy with these wishes led Rivers to pass him as fit for service in November 1917."

Sassoon wrote the following poem about Rivers.



To a Very Wise Man,

I

Fires in the dark you build; tall quivering flames
In the huge midnight forest of the unknown.
Your soul is full of cities with dead names,
And blind-faced, earth-bound gods of bronze and stone,
Where priests and kings and lust-begotten lords
Watch the procession of their thundering hosts,
Or guard relentless fanes with flickering swords
And wizardry of ghosts.

II

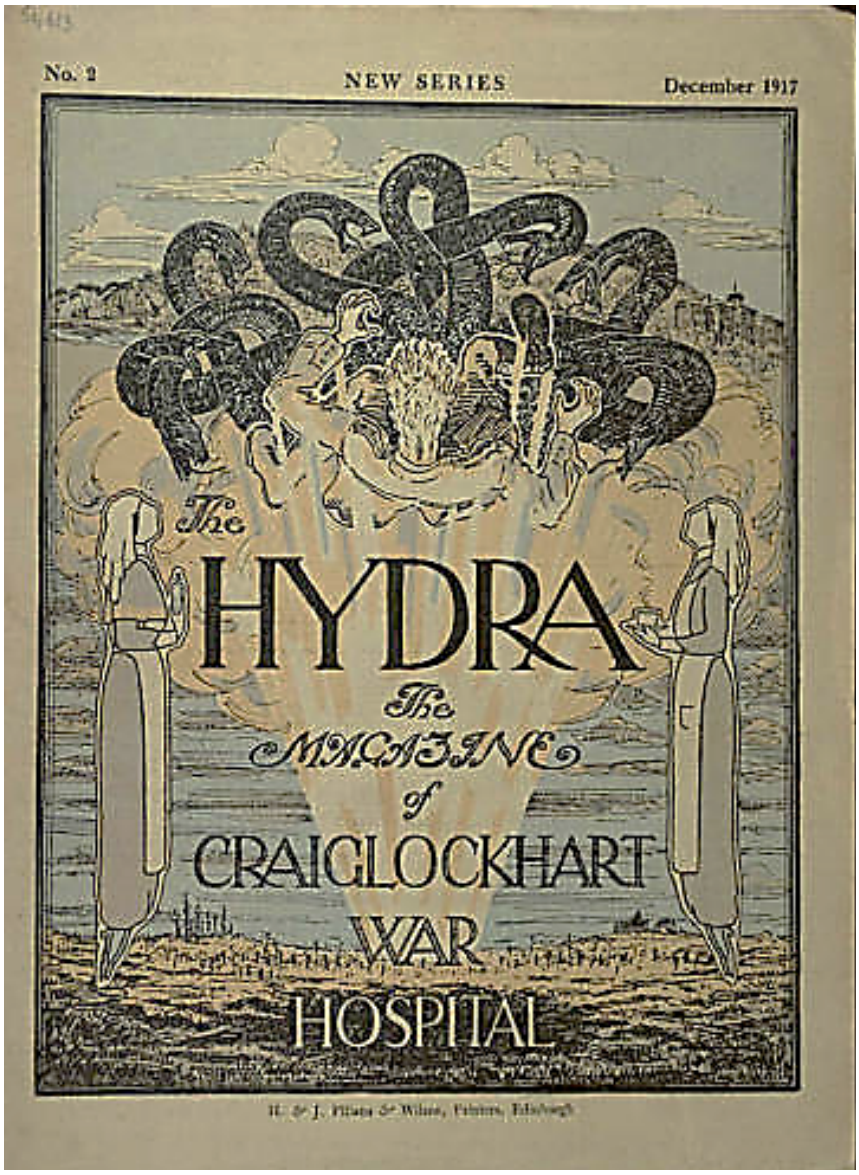
In a strange house I woke; heard overhead
Hastily-thudding feet and a muffled scream...
(Is death like that?)... I quaked unconforted,
Striving to frame to-morrow in a dream
Of woods and sliding pools and cloudless day.
(You know how bees come into a twilight room
From dazzling afternoon, then sail away
Out of the curtained gloom).

III

You understand my thoughts; though, when you think,
You're out beyond the boundaries of my brain.
I'm but a bird at dawn that cries 'chink, chink,'—
A garden-bird that warbles in the rain.
And you're the flying-man, the speck that steers
A careful course far down the verge of day,
Half-way across the world. Above the years
You soar... Is death so bad?... I wish you'd say.

***To A Very Wise Man,* Poem by Sassoon, Siegfried (1886-1967). P**

This poem was inspired by W. H. R. Rivers, Sassoon's doctor at Craiglockhart War Hospital. It was published in 'Picture-Show' (1919).



The front cover of the Craiglockhart Hospital magazine, *The Hydra*, December 1917. P

Public domain image.

The Hydra was a publication by the shell-shocked soldiers at Craiglockhart. The image depicts a hydra attacking a soldier. They hydra was the many-head monster that Hercules struggled to defeat. It seems it was used to illustrate an analogy to the idea that shell shock can involve

problems and symptoms resurfacing in different forms. The magazine was a vehicle for patients to express their experiences. It was edited by Brock's patient, the famous war poet, Wilfred Owen.

Do we need to rediscover shell shock and post-traumatic fibromyalgia in soldiers?

Presently (2019) the opioid crisis rages on. Many soldiers have been affected.

"NEW YORK (Reuters) - Opioid drug abuse has killed more Americans than the Iraq, Afghanistan and Vietnam wars combined, and U.S. veterans and advocates this Veteran's Day are focusing on how to help victims of the crisis.

Veterans are twice as likely as non-veterans to die from accidental overdoses of the highly addictive painkillers, *a rate that reflects high levels of chronic pain among vets*, particularly those who served in the wars in Iraq and Afghanistan, according to federal data.

U.S. government and healthcare officials have been struggling to stem the epidemic of overdoses, which killed more than 64,000 Americans in the 12 months ending last January alone, a 21 percent increase over the previous year, according to the Centers for Disease Control. About 65,000 Americans died in Vietnam, Iraq and Afghanistan." (Opioid abuse crisis takes heavy toll on U.S. veterans, November, 2017, Barbara Goldberg)

Questions of practical importance are the following: How many actually have post-traumatic fibromyalgia placing them in pain and driving their addiction? How aware are medical personnel of this possibility? How many are equipped to screen for the problem using the tender point exam and the ACR criteria for fibromyalgia? In the 1890ies, Oppenheim led the way and he realized that pain was the main symptom of what he called "the traumatic neurosis". Modern doctors have no problem fathoming that a direct injury could cause severe pain, but they often have difficulty believing that a psychological trauma could cause symptoms that are that severe. Maybe it is time for rediscovery. Fortunately, major wars are less frequent now. In the past, especially during WWI, the doctors were getting a grip on understanding non-physical injuries due to warfare, but in recent times they seem to have lost organizational memory and seem to need to rediscover the lessons of the past. With long periods between wars the seasoned doctors such as Halse Rivers and Philip Showalter Hench and Boland, move on and the new ones are left to relearn.

YouTube videos on shell shock and the Battle of Somme:

For a series of four videos about shell shock in WWI see:

https://www.youtube.com/watch?v=cc7ehb8agWY.

For footage of the Battle of Somme see: https://www.youtube.com/watch?v=-Tv5gBa9DQs.

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Shell Shocked Britain: The First World War's Legacy for Britain's Mental Health, Suzie Grogan, Pen and Sword, Oct 31, 2014 available at Google Books in preview mode at: https://books.google.ca/books/about/Shell_Shocked_Britain.html?id=LnBtBQAAQBAJ&redir_esc=y.

For archival materials on Yealland in Queens Square see:

https://www.queensquare.org.uk/archives/search?utf8=%E2%9C%93&q=Yealland&types=all&df%5Byear%5D=&df%5Bmonth%5D=&df%5Bday%5D=&dt%5Byear%5D=&dt%5Bmonth%5D=&dt%5Bday%5D=&af%5Byear%5D=&af%5Bmonth%5D=&af%5Bday%5D=&at%5Byear%5D=&at%5Bmonth%5D=&at%5Bday%5D=&order=modified&commit=Go

For a YouTube video entitled "Shell Shock in WWI" by Dr. Alan Brown go to: https://www.youtube.com/watch?v=faM42KMeB5Q

For a documentary film on trench warfare in WWI entitled: "Diggin Up The Trenches - 60,000 British soldiers died on the first day in trench warfare" see: https://www.youtube.com/watch?v=STlK-7YnVMY.)

War Neurosis at Netley Hospital.

https://ia800306.us.archive.org/15/items/WarNeurosesNetleyHospital1917-wellcome/0055-0000-4163-0000-0-0000-0000-0.mp4

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