

UNIVERSITY OF CANTERBURY

‘A Light Sniff Might Mean Death’

Soldiers’ Responses to Poisonous Gas Throughout the
First World War

‘This dissertation is submitted in part fulfilment of the requirements for the degree of BA Honours in History at the University of Canterbury. This dissertation is the result of my own work. Material from the published or unpublished work of other historians used in the dissertation is credited to the author in the footnote references. The dissertation is approximately 9,971 words in length.’

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Abstract

This research paper examines soldiers' responses to poisonous gas throughout the First World War. Accounts from British and Dominion, American and German soldiers who fought along the Western Front have been collected to analyse the psychological impact gas had upon a variety of men throughout the conflict. Contemporary letters and diaries as well as post-war oral testimonies and memoirs form the basis of the evidence used. The topic encompasses three strands of historical scholarship and engages with each to explore more thoroughly the responses obtained. Emphasis is placed on the psychological impact of gas upon the individuals assessed. Ultimately, this dissertation demonstrates that upon its introduction, poison gas was capable of instilling fear into men whether previously exposed to its consequences or not. However, this psychological power was to significantly diminish following the production and distribution of anti-gas protective measures in late 1916. Despite decreasing anxiety, gas retained its title as a 'terror weapon' from effectively inspiring fear into men who were unprotected, ill-prepared, and subsequently vulnerable, in the face of the poison.

Contents

Abstract.....	2
List of Abbreviations.....	4
Introduction.....	5
Chapter One: Anger, Fear, Enthusiasm: 1915-1916.....	15
Chapter Two: Panic Meets Protection: 1916-1918.....	29
Conclusion.....	44
Bibliography.....	46

List of Abbreviations

Imperial War Museum (IWM)

Small Box Respirators (SBR)

Introduction

Myth supersedes the reality of poisonous gas throughout the First World War, by depicting all soldiers as significantly affected by gas, their lungs drowning in fluid as a consequence of the green cloud engulfing the battlefield.¹ Introduced to the war by Germany during the Second Battle of Ypres in April 1915, gas's ability to cause disruption to military tactics as well as to the psychological or physical welfare of soldiers' led to allied retaliation by September of the same year.² The continually improving ways to distribute gas, coupled with its increasing use and potency perpetuated myths of its devastating nature despite scholarship explicitly stating that if gas had in fact been that destructive, the war would have ended as a result of its early implementation.³ Currently, scholarship has shifted to focus predominantly on soldiers' experiences with the weapon with emphasis placed on the poison's ability to promote and sustain psychological fear throughout the war.⁴ However, a diverse analysis of men who experienced poisonous gas is still needed in order to understand, more generally, the impact of gas upon soldiers throughout the war.

This dissertation examines responses toward poison gas by British and Dominion soldiers who fought along the Western Front throughout the First World War, using American and German accounts when necessary to illustrate continuities between responses to gas. Particular attention is given to the psychological impact of gas and

¹ D. Richter, *Chemical Soldiers: British Gas Warfare in World War I*, Kansas, University Press of

² For information on the first use of gas of both Germany and the Allies see L. Haber, *The Poisonous Cloud: Chemical Warfare in the First World War*, Oxford, Clarendon Press, 1985, pp. 22-83.

³ Richter, *Chemical Soldiers*, p. 1.

⁴ E.g., E. Jones, 'Terror Weapons: The British Experience of Gas and Its Treatment in the First World War', *War In History*, vol. 21, no. 3, 2014; T. Cook, *No Place to Run: The Canadian Corps and Gas Warfare in the First World War*, Vancouver, UBC Press, 1999.

shifting attitudes towards it as the war progressed. Also considered are the isolated circumstances of each man while writing or speaking of his experience with poison gas. Through a close analysis of a limited, but varied body of primary evidence, this research paper demonstrates that fear was not the only reaction to gas, with equipment, training, and exposure all contributing to the poison psychologically impacting men in varied ways. Fear, however, proved the most prevalent response.

This paper has been split into two sections in order to explore soldiers' experiences of gas within two blocks of time. Chapter one examines the early stages of gas's use, from 1915 to mid-1916. The chapter then analyses the response in regards to whether the soldier had been exposed to gas or not. Consequently, dominant themes like anger, fear, and enthusiasm have been identified and explored within the context of the conflict and wider society. Concluding that during 1915 and 1916 gas was a powerful psychological weapon, as men still unexposed to the poison became anxious as its use intensified. Chapter two assesses attitudes towards gas attacks from mid-1916 to 1918, through a limited number of sources. The evidence has been considered in conjunction with the improving anti-gas measures throughout the period in order to observe the effectiveness of said measures. Suggesting that the implementation of adequate protection and training gradually minimised the immediate threat of poison gas. Despite this, however, anti-gas measures remained unable to entirely eliminate the psychological power of the weapon.

Source limitations have significantly affected the intention and conclusions of this research paper. Initially, I intended to rely solely on contemporary documents to assess the immediate psychological impact of gas upon soldiers. However, electronic

and geographic restrictions have prohibited obtaining a substantial body of contemporary evidence. Current centenary memorialisation projects have resulted in a fluctuation of fragile First World War documents being digitised and made accessible online.⁵ Consequently, I have been able to collect nine digitised British, Canadian, New Zealand and American letters and diaries that record experiences with poison gas.

The content of the contemporary responses also require discussion. It is plausible that soldiers could have omitted information from their letters or diaries due to official censorship, fear of exposing cowardice, or personal censorship to not worry loved ones at home.⁶ The potential for men to reserve truthful reactions to avoid worrying recipients or projecting weakness must be considered when analysing the accounts. Furthermore, the nature of warfare did not always permit the immediate recording of information, especially following a gas attack, as it was common for gassed soldiers to be temporarily blinded or for poison gas to be followed by heavy artillery fire.⁷ This could allow a soldier time to process a traumatic event and subsequently record it after their shock had dispersed, or alternatively, as suggested by Michael Roper,

⁵ E.g., Vancouver Island University, 'Canadian Letters & Images Project', <http://canadianletters.ca/index.php>, 2015, accessed on 14 October 2015; 'Europeana: Think Culture', <http://www.europeana.eu/portal/>, accessed on 14 October 2015; 'Canterbury 100: Remembering the First World War', <http://www.canterbury100.org.nz/>, 2014, accessed on 14 October 2015.

⁶ For fear of exposing weakness see, e.g., M. Hanna, 'War Letters: Communication between Front and Home Front', *1914-1918-online. International Encyclopedia of the First World War*, U. Daniel, P. Gatrell, O. Janz, H. Jones, J. Keene, A. Kramer and B. Nasson, (ed.), issued by Freie Universität. http://encyclopedia.1914-1918-online.net/article/war_letters_communication_between_front_and_home_front, accessed 1 October 2015; M. Roper, 'Between Manliness and Masculinity: The "War Generation" and the Psychology of Fear in Britain, 1914-1950', *Journal of British Studies*, vol. 44, no. 2, 2005, pp. 350-359. For discussion of men not wanting to worry loved ones as well as issues with censorship see, e.g., M. Hanna, 'A Republic of Letters: The Epistolary Tradition in France during World War I', *American Historical Review*, vol. 108, no. 5, 2003.

⁷ E. Jones, 'The Psychology of Killing: The Combat Experience of British Soldiers during the First World War', *Journal of Contemporary History*, vol. 41, no. 2, 2006, p. 223. A. Palazzo, *Seeking Victory on the Western Front: The British Army and Chemical Warfare in World War I*, Lincoln, University of Nebraska Press, 2000, pp. 45-46.

some soldiers would immediately suppress trauma and reconsider the event post-war.⁸ Integrating a variety of post-war accounts of poison gas attacks not only compensates for the shortage of contemporary sources, but the combined responses allow for comparison to achieve more precise conclusions.

Thus, eight memoirs and oral testimonies have been selected from various mediums. The three oral testimonies have been obtained through the Imperial War Museum's sound archive and were recorded throughout the late-twentieth century, posing significant limitations. For instance, the interviewer asks questions throughout, to guide the interview. Beneficially, the questions asked are included in the published recordings, so I know what has been asked and in what context. However, this process does not allow the veteran to recount their experiences by what they see as significant, so information they may not have retained as important could be remembered falsely in order to answer a question or events they may have considered as important could have been left out. A limitation relevant to both oral testimony and memoirs is reliability, as it is likely the writer could have made mistakes, produced false information, or be biased in how they represent themselves, or others.⁹ Consequently, I have tried to analyse these texts as critically as possible, cross-referencing out-lying themes or events with secondary material when necessary, predominantly referring to secondary scholarship to assess issues with memory.¹⁰ Due to the implications of remembering, I have selected memoirs written as close to the end of war as possible.

⁸ M. Roper, *The Secret Battle: Emotional Survival in the Great War*, Manchester, Manchester University Press, 2009, p. 254; Roper, 'Between Manliness and Masculinity', pp. 350-359.

⁹ S. Proctor, 'Oral History Comes of Age', *The Oral History Review*, vol. 3, no. 1, 1975, p. 2.

¹⁰ Proctor, 'Oral History Comes of Age', p. 2. See also: A. Green and K. Troup, *The houses of history: A critical reader in twentieth-century history and theory*, Manchester, Manchester University Press, 1999, pp. 230-53.

The greatest limitation of using both sources is the time passed between the First World War and when they were written or recorded. Following the armistice, testimony and memoirs exposed the realities of the conflict and after World War II the Great War became represented as futile.¹¹ Roper suggests that personal narratives cannot be written in isolation from the public memory of the war, resulting in post-war testimonies potentially reflecting the attitudes of the time in which they were written, as opposed to when they were experienced.¹² This does not ensure reliability. Dan Todman stresses that veteran accounts must be critically analysed as their experiences are only ever partially remembered; therefore, their accounts cannot be considered reliable simply because they fought in the war.¹³ As time has passed the way the war has been collectively and publically remembered and represented has shifted from contemporary understandings,¹⁴ potentially creating a cultural context around a source in relation to when it was written, this is something I have remained critically aware of while reading, listening and analysing the sources.

The topic of this dissertation falls within several strands of scholarship on the First World War; specific studies of gas; exploration of psychological effects and scholarship on combat motivation, masculinity, and morale.

¹¹ J. Winter, *Sites of Memory, Sites of Mourning: The Great War in European cultural history*, Cambridge, Cambridge University Press, 1995, pp. 7-10; D. Todman, *The Great War: Myth and Memory*, London, Hambledon and London, 2005, pp. 122-23, 152, 187-88.

¹² M. Roper, 'Re-Remembering the Soldier Hero: The Psychic and Social Construction of Memory in Personal Narratives of the Great War', *History Workshop Journal*, No. 50, 2000, p. 183. See also J. Meyer, *Men of War, Masculinity and the First World War in Britain*, London, Palgrave MacMillan, 2009, Introduction; S. Hynes 'Personal narratives and commemoration' in J. Winter and E. Sivan (ed.), *War and Remembrance in the Twentieth Century*, Cambridge, Cambridge University Press, 1999, p. 205.

¹³ Todman, *The Great War*, pp. 187-88.

¹⁴ For a discussion on the representation of the war since armistice see, e.g., Winter and Sivan, *War and Remembrance*, pp. 1-5; Todman, *The Great War*; H. McCartney, 'The First World War soldier and his contemporary image in Britain', *Internal Affairs*, vol. 90, no. 2, 2014, pp. 299-302.

The historiography of poisonous gas in the First World War has evolved significantly since the 1980s when the first scholarly assessments of the weapon emerged. This initial scholarship assessed military responses to gas attacks as evident in Ludwig Haber's *The Poisonous Cloud*, which considered the technicalities and effectiveness of gas in warfare, concluding that it is indeed myth that surrounds the weapon, as tactically, the weapon was ineffective.¹⁵ Coinciding with this publication was work seeking to incorporate the human element into the literature, yet the focus remained on the risks chemical weapons posed to wider society and future warfare.¹⁶ In response to John Keegan's appeal for greater historical consideration of soldier experience during the war,¹⁷ a fluctuation of poisonous gas scholarship fulfilled his proposed model. Notably, Donald Richter focused on the 'human dimension' of the British Special Brigade.¹⁸ Richter demonstrated that gas wasn't as destructive as myth would suggest through capturing the everyday life of the brigade, using the men's own words as often as possible.¹⁹ A range of publications followed Richter's, focusing on case studies of particular armies, units, or a society, in order to assess the effect of gas on specific groups of people.²⁰ Currently, gas scholarship sits comfortably within a soldier experience context but with a firmer focus on the psychological impact of gas upon soldiers. The most comprehensive work of this nature is Tim Cook's *No Place to Run*, which studies the Canadian Corps' interaction with gas, concluding that the poison remained a prevalent psychological fear

¹⁵ Haber, *The Poisonous Cloud*; G. Hartcup, *The War of Invention: Scientific Developments, 1914-18*, London, Brassey's Defence Publishers, 1988, pp. 94-117.

¹⁶ E. Spiers, *Chemical Warfare*, Urbana, University of Illinois Press, 1986; W. Moore, *Gas Attack: Chemical Warfare 1915-1918 and afterwards*, London, Leo Cooper, 1987.

¹⁷ J. Keegan, *The Face of Battle*, Middlesex, Penguin Books Ltd, 1978, pp. 26-35.

¹⁸ Richter, *Chemical Soldiers*, p. 1.

¹⁹ Richter, *Chemical Soldiers*, p. 4.

²⁰ E.g., Palazzo, *Seeking Victory on the Western Front*; M. Girard, *A Strange and Formidable Weapon: British Responses to World War I Poison Gas*, Lincoln, University of Nebraska Press, 2008.

throughout the war for these men.²¹ Cook's study will feature predominantly throughout this dissertation, as his conclusions are comparable to the findings throughout this paper. Unlike any dominant works within the scholarship this dissertation will analyse soldier responses from varying nationalities, armies, time periods and military positions. In doing so, it will produce a broad, inclusive study of soldiers' experience of poison gas throughout the war.

Intertwined with the current state of poison gas scholarship, are discussions around the psychological effects of war upon soldiers. Relating to both gas and fear Edgar Jones proposes a theory of "gas shock", stating that gas induced such strong fears that a soldiers' 'rational evaluation' and 'coping mechanism' could be disrupted.²² Coupled with Cook, his conclusions are tested in Chapter two, to assess whether such conclusions can be applied more broadly than the British or Canadian experience. Leo van Bergen and Roper have focused predominantly on the psychological impact of war - in its entirety - on a soldier.²³ Van Bergen explores degrees of psychological fear depending on ones exposure to traumatic experiences, proposing that fears fluctuated from 'healthy' to 'obsessive' due to new technology depersonalising warfare as death was not often a result of face-to-face combat with an enemy.²⁴ Furthermore, Roper discusses soldiers' psychological trauma, coining the term 'battle stress' and concluding that men felt little separated from the victims of warfare, constraining them in a perpetual state of anxiety.²⁵ Van Bergen and Roper's studies have provided useful models for understanding categories of soldiers' psychological

²¹ Cook, *No Place to Run*, pp. 8-9. See also: T. Cook, 'Creating the Faith: The Canadian Gas Services in the First World War', *The Journal of Military History*, vol. 62, no. 4, 1998.

²² Jones, 'Terror Weapons', p. 375.

²³ L. van Bergen, *Before My Helpless Sight: Suffering, Dying and Military Medicine on the Western Front, 1914-1918*, Surrey, Ashgate Publishing Ltd, 2009; Roper, *The Secret Battle*.

²⁴ Van Bergen, *Before My Helpless Sight*, p. 205.

²⁵ Roper, *The Secret Battle*, p. 247.

fear that are discussed within this paper. Jones and Cook offer similar, but further refined conclusions that are relevant particularly in the second section of this paper when assessing the capability of gas to sustain its name as a ‘terror weapon’. While Cook and Jones focus respectively on British and Dominion forces this research will build from, and test their conclusions on a variety of soldiers, whether a private or officer, a German or a Canadian.

Comradeship, sacrifice, and masculinity are predominant underlying themes in the sources presented within this paper and coincide with a wider body of scholarship of soldier experience throughout the First World War. Idealized attributes including emotional self-control, courage, sacrifice for nation or Empire, and camaraderie defined notions of masculinity prior to and throughout the war.²⁶ This discourse has not been forgotten as I have assessed soldiers’ responses to poison gas as, potentially, a man who was significantly fearful of gas could have suppressed fears to not show weakness.²⁷ Roper has emphasised the connection between the image of masculinity and suppression of fear, claiming that men exhibiting extreme anxiety risked their ‘codes of “manliness” and were subsequently seen as failures of the masculine ideal.’²⁸ Such conclusions have been further extenuated through discussions of combat motivation, with Jessica Meyer proposing that soldiers did not want to ‘lose control’ or succumb to fear at the expense of their masculinity, claiming that masculine

²⁶ J. Meyer, ‘Gladder to be Going Out than Afraid’: Shellshock and Heroic Masculinity in Britain, 1914-1919’ in J. MacLeod and P. Purseigle, *Uncovered Fields: Perspectives in First World War studies*, The Netherlands, Koninklijke Brill, 2004, pp. 195-97; G. Dawson, *Soldier Heroes: British adventure, empire and the imaging of masculinities*, London, Routledge, 1994, p. 1; Roper, ‘Between Manliness and Masculinity’, pp. 347-48; G. Mosse, *The Image of Man: The creation of modern masculinity*, Oxford, Oxford University Press, 1996, pp. 3-16.

²⁷ Roper suggests this means post-war testimonies are of significant value, as this context is no longer present, see: Roper, ‘Between Manliness and Masculinity’, pp. 350-53.

²⁸ Roper, ‘Between Manliness and Masculinity’, pp. 345, 351. See also, A. Watson and P. Porter, ‘Bereaved and aggrieved: combat motivation and the ideology of sacrifice in the First World War’, *Historical Research*, vol. 83, no. 219, 2008, p. 147.

ideologies and consciousness of comradeship outweighed individual strains.²⁹ Joanna Bourke reaffirms this notion, suggesting that for soldiers, a physical injury was ‘more reassuring’ than psychological, as mental conditions implied ‘insanity or cowardice’ which starkly contrasted the heroic masculine ideology inherent to the time.³⁰ Such discussion remains pertinent throughout this research paper as a possible reason to why gas visibly affected some men and not others.

Consideration of morale when assessing attitudes towards gas supplements analysis of soldiers’ actions and responses under extreme conditions. J.G. Fuller proposes that morale was subject to multiple factors such as food, comradeship, weapons and success, suggesting that morale was never constant but subject to endless variations.³¹ This suggests that each response must be assessed individually, considering isolated circumstances, a method employed throughout this research. By contrast, Alexander Watson claims that morale is intertwined with confidence, both in one’s army and in oneself.³² He believes that comprehensive training coupled with assurance of victory produced and sustained troop morale.³³ In assessing the impact of anti-gas training and protective equipment on the troops, this dissertation tests these claims in relation to gas and suggests training and protection attributed to a gradual decline in the psychological effectiveness of the poison in the later years of the war. However, the

²⁹ Meyer, ‘Gladder to be Going Out than Afraid’, pp. 204-206.

³⁰ J. Bourke, *Dismembering the Male: Men’s Bodies, Britain and the Great War*, Chicago, The University of Chicago Press, 1996, p. 118. While assessing the importance of letter writing for soldiers, Roper explores connections between cowardice, homesickness and fear in M. Roper, ‘Nostalgia as an Emotional Experience in The Great War’, *The Historical Journal*, vol. 54, no. 2, 2011, pp. 429-432. See also, Meyer, ‘Gladder to be Going Out than Afraid’ p. 198.

³¹ J.G. Fuller, *Troop Morale and Popular Culture in the British and Dominion Armies 1914-1918*, Oxford, Oxford University Press, 1991, pp. 29-31.

³² Watson, *Enduring the Great War: Combat, Morale and Collapse in the German and British Armies, 1914-1918*, Cambridge, Cambridge University Press, 2008, p.141; Haber, *The Poisonous Cloud*, p. 41.

³³ Watson, *Enduring the Great War*, p.141.

underlying psychological impacts of gas became apparent when protective measures failed, demonstrating the dominant power of poison gas.

Anger, Fear, Enthusiasm: 1916-1918

This chapter examines soldiers' responses to poison gas within the period 1915 to mid-1916. Demonstrating that fear towards gas built within soldiers following its introduction at the Second Battle of Ypres. Various factors are considered, none more distinctive than whether a man was exposed to gas or not. Key themes such as excitement, anger, fear and anxiety emerge from an analysis of the sources, with evident variations between men who had been exposed and those who had not. Moreover, an examination of wider social events demonstrates various possible influences that may have affected the ways each man reacted to gas. For instance, German atrocities, propaganda, anti-French sentiment, and traditional ideals of masculinity and cowardice are considered and help to contextualise why men had such differing experiences. Interestingly, more reactions to gas are recorded by men who had been exposed to the weapon as opposed to those who had not. This suggests that, upon its introduction, soldiers who had not come into contact with the poison did not view its implementation into warfare seriously. Ultimately this section assesses how soldiers' fears towards gas increased in relation to their exposure, reinforcing the concept that poison gas was a terror weapon.

Men Unexposed to Gas:

Excitement about the introduction of poison gas features in various ways within the accounts of men unexposed to the weapon. A captain with the British 2nd Life Guards, Sir Morgan Crofton, expressed eagerness in response to news of the first use of gas at

Ypres, most likely a result of his professional military background that presumably saw him interacting with various weapons and tactics. Following the attack at Ypres he wrote in his diary, ‘the Germans had overpowered the French near Bixschoote with gases during the night. They were now advancing *en masse*... this was jolly, and we at once sallied out to see if there was any authentic news of this affair.’³⁴ He continued, ‘this looks like the long expected German boost coming off at last.’³⁵ These remarks are representative of Crofton’s militarily charged attitude towards the conflict. Having been part of the British Army since 1899, it is unsurprising that preceding April 23 Crofton’s entries reflected a professional approach to viewing and documenting the war through focusing on military wins and losses and rumoured strategies.³⁶ Crofton’s military experience and professional documentation of the war suggests that his enthusiasm towards the use of gas was a genuine response as his previous experience may have moulded him to understand an ‘open war of movement’ not stalemated through ‘static trench warfare.’³⁷ It is relatively unsurprising that Crofton’s initial response did not consider the wider implications of gas used in warfare, as no personal exposure or understanding of the physical effects could exhibit the introduction as militarily revolutionary. Thus, inability to advance with active combat as a result of trench warfare led Crofton to respond eagerly to the arrival of a new weapon.

³⁴ Crofton diary, 23/04/15, in G. Roynon (ed.), *Massacre of the Innocents: The Crofton Diaries, Ypres 1914-1915*, United Kingdom, Sutton Publishing Limited, 2004, p. 208.

³⁵ Crofton diary, 23/04/15, p. 208.

³⁶ Sir M. Gilbert, ‘Foreword’ in Roynon *Massacre of the Innocents*, pp. xi-xii. For entries that exhibit Crofton’s militarily-charged writing see: Crofton diary, 12/03/15, p. 172; Crofton diary, 07/04/15, p. 192; Crofton diary, 12/04/15, p. 195.

³⁷ T. Ashworth, *Trench Warfare 1914-1918: The Live and Let Live System*, Hampshire, The MacMillan Press Ltd, 1980, pp. 1-2.

Crofton's response to the arrival of poison gas was most likely a consequence of his military background, yet similar enthusiasm was expressed from a man who had no combat experience. Suggesting that despite a man's military position or experience, soldiers could react similarly to poison gas. Bernard Joseph Brookes of the London Regiment and 16th Battalion was met with mixed emotions upon learning that his battalion would be moving towards a 'gas area'.³⁸ He noted that he was 'by no means overjoyed' with the idea of leaving for Ypres but that, 'on the other hand we had got rather tired of the monotony round our way, and we were rather keen on "having a go" at the Bosches.'³⁹ Brookes and his fellow soldiers' 'rather keen' attitude to fight the Germans most likely resulted from recent losses within his company due to German fire, which appeared to significantly disturb him.⁴⁰ Coupled with this was the 'monotony' of trench life that he sought to escape, as suggested by Fuller 'boredom was the inescapable condition of army life' potentially explaining Brookes' willing attitude to moving to the notorious 'gas area', Ypres.⁴¹ Two days after receiving this news Brookes wrote, 'after a very hot and tedious day on Friday 28 May we were relieved in the trenches by the Cambridgeshire Regiment... they had come from Hill 60, and they told us tales of gas and fighting there to cheer us up.'⁴² This remark further reiterates Brookes' discontentment with life within the trenches, which could have been disappointing in the sense that static warfare was not the assumed combat

³⁸ Bernard Joseph Brookes diary, 26/05/15, 'Chapter 3: France from 1st January 1915 until 31st May 1915' *A True and Personal Record of Experiences as a Signaller in the Army at Home and Abroad during the European War (1914)*, http://www.bobbrookes.co.uk/diary_main.htm, accessed on 06/10/2015. [Henceforth Brookes diary].

³⁹ Brookes diary, 26.05.15; Brookes discusses the monotony of trench life in detail as far back as February 1915 e.g., Brookes diary, 04/02/15.

⁴⁰ Brookes diary, 04/03/15.

⁴¹ Fuller discusses the boredom of trench warfare and how this was combated by food and leisure in Fuller, *Troop Morale*, pp. 85-92. For assessments of the monotony of trench warfare generally, see e.g. Roper, *The Secret Battle*, pp. 94,125-30; Todman, *The Great War*, pp. 5-7.

⁴² Brookes diary, 28/05/15.

adventure that inspired some men to enlist.⁴³ Brookes' willingness to be exposed to gas is apparently a result of hatred towards the 'Germans' and his previous inability to engage in combat due to tedious days spent in the trenches. Brookes was not a soldier before the war, which is why his reaction to gas differs significantly from Crofton. Crofton's tactical enthusiasm reflected his military past and gas was seen as a tactical way for the stalemate to end. For a new soldier like Brookes, gas related to an opportunity to experience front line action, which was something other than monotonous trench life. Both men highlight possible ways soldiers could respond enthusiastically to gas depending on their experience and role within the army.

Men who were not exposed to gas or aware of its destructive capability were quick to comment in relation to the French troops targeted by its first use. Crofton remarked that gas had come as a complete surprise to the French, 'who retired in the utmost disorder' but that 'the Canadians have done extremely well' to secure the line.⁴⁴ Brookes mentions a message received in relation to the first gas attack which stated that gas made 'the French think the devil was playing some tricks and the French bolted... The Canadians stood ground.'⁴⁵ Similarly, after the war had ended, Anthony R. Hossack, who served with the Queen Victoria Rifles during 1915, wrote of his battalion cheering for the Canadians who had filled the gap left by the French.⁴⁶ Relations between France and Britain had been fragile long before the war, and during the conflict there was a general lack of understanding and trust between the

⁴³ For an assessment of men joining the war for a sense of adventure see: D. Silbey, *The British Working Class and Enthusiasm for War, 1914-1916*, Oxford, Frank Cass, 2005, pp. 69-81.

⁴⁴ Crofton Diary 30/04/1915, p. 219.

⁴⁵ Brookes diary, 23/04/15.

⁴⁶ A.R. Hossack, 'The First Gas Attack' in C.B. Purdom (ed.), *Everyman at War: Sixty Personal Narratives of the War*, London, J.M Dent & Sons Ltd., 1930, pp. 30-31.

nations as a result.⁴⁷ The responses above aim negative sentiments towards the French soldiers' conduct through glorifying the actions of the Canadians. A subconscious relationship between pre-war ideals of masculinity, camaraderie, and cowardice, exemplify the men's attitudes towards the French during this gas attack.⁴⁸ Jessica Meyer proposes that, 'comradeship became for many British soldiers more important to the definition of heroic masculinity than self-control', and that a willingness to control one's fear, 'particularly for the sake of one's comrades, became... an increasingly important element in the definition of courage for many British soldiers'.⁴⁹ Crofton, Brookes and Hossack's comments all arguably validate Meyer's claim. Their responses portray the Canadians as loyal, heroic and masculine for standing their ground, whereas the French are perceived as weak for succumbing to fear and jeopardising the allied line. Each response also demonstrates a relationship between heroism and comradeship ideology through portraying the Canadian's as heroic, an inherent ideal of masculinity at this time, as well as exemplifying their sacrifice for Empire and fellow comrades that Watson and Porter suggests was a pertinent ideology throughout First World War warfare.⁵⁰ In this instance, the first gas attack at Ypres tested the French and Canadian troops against ideals of comradeship and masculinity, allowing Crofton, Brookes and Hossack to extenuate pre-existing British and French rivalry.

Coinciding with the increasing use of gas along the front, rumours began to circulate within wider British society and within the trenches, causing soldiers' attitudes

⁴⁷ R and I Tombs, *That Sweet Enemy: Britain and France: The History of a Love-Hate Relationship*, New York, Vintage Books A Division of Random House, Inc., 2006, p. 460.

⁴⁸ E.g. Meyer, *Men of War*, p.10; Bourke, *Dismembering the Male*; Watson and Porter, 'Bereaved and aggrieved', pp. 147-150, 163-164.

⁴⁹ Meyer, *Uncovered Fields*, p.207.

⁵⁰ E.g. Dawson, *Soldier Heroes*, p. 1; Roper, 'Between Manliness and Masculinity', pp. 353-55; Watson and Porter, 'Bereaved and aggrieved', p. 147.

towards the weapon to shift. Crofton's initial enthusiasm for gas's tactical potential mellows to one of caution a month after its first use at Ypres. In May Crofton was told that members of his squadron were to be sent to Ypres, he wrote, 'we shall be anxious about them while they are up there, and anxiously watch the wind to see if it is favourable for gas.'⁵¹ Since the allied forces had not yet used gas in battle, Crofton is not referring to winds 'favourable for gas' for British tactics, but rather out of fear that the Germans will deploy gas against his comrades.⁵² Upon writing this, Crofton was still physically unexposed to gas; however, he mentioned in passing the issuing of 'hastily-improvised respirators' as well as obtained intelligence regarding the logistics of the first gas attack.⁵³ Crofton's anxiety was most likely a result of a broader circulation of information regarding gas and its effects to soldiers' bodies – either from along the front or perhaps information published in Britain. The Official report to the British Secretary of State for War, published in British newspapers on 29 April 1915, stated that gassed men, 'were lying struggling for breath and blue in the face' and referred to poisonous gas as 'brutally barbarous'.⁵⁴ Depictions and rumours of the effects of gas coincided with wider German atrocity scandals such as the sinking of the passenger liner *Lusitania* and the publication of the Bryce Report that exposed German brutality upon their invasion of Belgium.⁵⁵ News of the crimes within the report spread throughout wider British society in an attempt to inspire new

⁵¹ Crofton Diary, 29/05/15, p. 256.

⁵² The first use of gas from the Allied forces was the British use of chlorine gas at the Battle of Loos in September 1915. For more information on the first British use see e.g. Richter, *Chemical Soldiers*, pp. 61-87; Palazzo, *Seeking Victory on the Western Front*, pp. 53-77.

⁵³ Crofton Diaries, 08/05/15, pp. 228- 230.

⁵⁴ W.G. Macpherson, W.P. Herringham, T.R.Elliott and A. Balfour, *History of the Great War Based on Official Documents: Medical Services Diseases of the War Vol. II*, London, H.M Stationery Office, 1923, p. 273. The report appeared in *The Times*, 'Lethal Gases in War', England, Thursday, April 29 1915, p. 9.

⁵⁵ E.g. J. Horne and A. Kramer, *German Atrocities, 1914 A History of Denial*, New Haven, Yale University Press, 2001, pp. 232-37; T. Wilson, 'Lord Bryce's Investigation into Alleged German Atrocities in Belgium, 1914-15', *Journal of Contemporary History*, vol. 14, no. 3, 1979, pp. 369-70.

recruits.⁵⁶ Due to the extensive circulation of British newspapers throughout the British Expeditionary Forces, the newspaper reports most likely reached the trenches and were read by soldiers of all ranks.⁵⁷ Germany's unorthodox and cruel tactics created a stigma around the German officer corps, and van Bergen suggests that atrocities mentioned within the report did become propaganda that circulated through trenches, increasing hatred and inspiring fear of the German army's capability.⁵⁸ It is probable that, for Crofton, his increased anxiety of gas could have resulted from mounting suspicion of Germany's absent moral conduct during war, as well as the possibility that he had been receiving news or rumours of the consequences of gas to the human body.

Men Exposed to Gas:

Unsurprisingly, when assessing reactions to poison gas from soldiers who had been exposed to the weapon, the most recurring theme is fear. Canadian Private James Wells Ross portrayed this when he wrote, 'And that ---- gas too. The very smell of it now makes my heart drop into my boots. Our first experience with it was of such an accompanying sense of critical danger.'⁵⁹ This letter was written on 17 May 1915 before adequate protection against gas had been administered. Jones suggests that before the distribution of effective gas masks in mid-1916, it was general unpreparedness to the weapon that established anxiety and solidified the poison as a

⁵⁶ N. Gullace, *"The Blood of Our Sons" Men, Women, and the Renegotiation of British Citizenship During the Great War*, New York, Palgrave MacMillan, 2002, pp. 18-26.

⁵⁷ N. Hiley, "'You can't believe a word you read': Newspaper-reading in the British Expeditionary Force, 1914-1918', *Studies in Newspaper and Periodical History*, vol. 2, no. 1-2, 1994, pp. 90-94; H. McCartney, *Citizen Soldiers: The Liverpool Territorials in the First World War*, Cambridge, Cambridge University Press, 2005, pp. 116-17.

⁵⁸ Van Bergen, *Before My Helpless Sight*, p. 27.

⁵⁹ 'Ross, James Wells, Letter to Unknown: May 17, 1915' *The Canadian Letters and Images Project*, <http://www.canadianletters.ca/letters.php?letterid=3252&warid=3&docid=1&collectionid=202>, accessed on May 8 2015.

‘terror weapon.’⁶⁰ Therefore the ‘sense of critical danger’ gas entailed for Ross was most likely a result of inadequate protection, lack of training, or circulating rumours of gas.⁶¹ Bernard Brookes, who had been in close proximity to gas on multiple occasions by July 1915 but had not been harmed due to having an early-developed gas mask, displayed extreme panic when ‘in a blissful ignorance’ he had left his respirator in the trench as he had set out on foot. Smelling gas along his journey he ‘wondered what length of time I had left to live’, in this instance it was not gas Brookes had smelt but the fumes of multiple ambulances. Brookes noted, ‘I cannot say that usually I enjoy the fumes of motor cars... but on this occasion nothing could have been sweeter.’⁶² This response reflects Jones’ conclusion that gas had the ‘capacity to inspire strong emotion’ making men panic and misinterpret ‘harmless sounds and smells’ due to its psychological power.⁶³ Furthermore, Cook suggests that gas propaganda illuminated the horrific effects of gas, extenuating anxieties for front line, ill-equipped soldiers.⁶⁴ The innate fear of gas demonstrated by both men is most likely a consequence of their previous exposure to gas, suggesting that in a state of panic men could associate being in close proximity to gas, unprotected, to death.

Men who saw the effects of gas on other soldiers also exhibited extreme fear. These men were not themselves harmed by gas, but witnessing soldiers being gassed instigated a psychological trauma that for one reason or another mentally scarred the individual or made them dread the weapon, a consequence of fear Roper suggests was

⁶⁰ Jones, ‘Terror Weapons’, pp. 356-7.

⁶¹ For similar expressions of fear by Canadian soldiers, see, Cook, *No Place to Run*, pp. 38-39, 44-45.

⁶² Brookes Diary, 10/07/1915.

⁶³ Jones, ‘Terror Weapons’, p. 263.

⁶⁴ Cook, *No Place to Run*, pp. 33-35.

common in warfare more generally.⁶⁵ British private of the North Staffordshire Regiment, Bernard Martin, recounted an incident at Ypres in 1916 when during a gas attack one man did not have a gas mask. Martin describes the man without a mask as ‘expressing horror’. He goes on to explain:

Before the cloud of gas reformed I saw this man lurch sideways, arms outstretched, attempting to pull off another man’s mask: a third, wielding what I judged to be a bit of broken duckboard, pressed between the two. I saw one of them fall to the ground. All over in a moment, a vivid picture in my mind for ever, and ever, and ever, and ever.⁶⁶

Evidently, Martin expressed an emotional and resonating response to gas’s ability to psychologically disturb a fellow soldier. Recording his war experience in 1985, at the age of eighty-eight, proves the significance of this event to Martin.⁶⁷ Samuel Hynes proposes that memoirs allow for a ‘greater element of reflection’ and through remembering specific events the focus becomes somewhat reflective, allowing ‘meaning and subject-response.’⁶⁸ Hynes’ conclusion is confirmed by Roper who suggests that post-war writing allowed memories that had remained ‘stuck in the mind’ to be recorded freely, thus reflecting the importance of the event to the soldier.⁶⁹ Although the immediate details of the incident may be inaccurate, the ‘vivid memory’ Martin revealed illustrates the meaning he has attributed to the event, and its

⁶⁵ Roper, *The Secret Battle*, p. 247. For scholarship that discusses mental stress in this context also see, e.g., van Bergen, *Before my Helpless Sight*, pp. 220-27; Watson, *Enduring the Great War*, pp. 22-34.

⁶⁶ B. Martin, *Poor Bloody Infantry: A Subaltern on the Western Front 1916-1917*, London, John Murray Publishers, 1987, p. 56.

⁶⁷ Martin, *Poor Bloody Infantry*, pp. 1-2.

⁶⁸ Hynes, ‘Personal narratives and commemoration’, p. 208.

⁶⁹ Roper, *The Secret Battle*, p. 254.

continued significance despite the time passed.⁷⁰ The soldiers' act of self-preservation described by Martin could have remained predominant in his memory as it highlighted the psychological power of gas to drastically alter inherent aspects of combat, comradeship and sacrifice,⁷¹ as he neglected these notions to save himself. This confirms Cook and Jones' arguments of gas's capacity to alter a man's mental state.⁷² Similarly, German Ernst Jünger's experience of witnessing victims of a gas attack instilled a fear within him that he retold in a post-war memoir. First published in 1920, his widely received memoir has had multiple rewrites; often these rewrites reflect the ideological climate of the cultural perception of the war at the time, or Jünger's age influencing his writing.⁷³ Despite this, Jünger's account remains valuable by offering a response to gas from the perspective of the belligerent side of the war. Interestingly, Jünger's response does not significantly differ from British and Dominion soldiers' reactions, implying that allied and belligerent forces experienced gas in similar ways and suggesting that German troops were no better accustomed to gas due to having introduced the weapon. Jünger exclaimed that the gassed German's were in 'terrible agony'.⁷⁴ He noted, 'I resolved never to go anywhere without my mask, having previously, incredibly foolishly, often left it behind in my dugout, and used its case... as a container for sandwiches. Seeing this taught me a lesson.'⁷⁵ Fear as a by-product of witnessing traumatic scenes was not uncommon throughout the war; Michael Roper labelled it 'battle stress' and claimed that many soldiers became

⁷⁰ Hynes, 'Personal narratives and commemoration', pp. 208-12. See also, Roper, 'Re-remembering the Soldier Hero', pp. 198-200.

⁷¹ For a discussion of the importance between comradeship and sacrifice see e.g., Watson and Porter, 'Bereaved and aggrieved', pp.147-8, 153-54, 159-62.

⁷² Jones, 'Terror Weapons', pp. 363-64; Cook, *No Place to Run*, pp. 237-38.

⁷³ M. Hofmann, 'Introduction' in E. Jünger, *Storm of Steel*, trans. M. Hofmann, London, Penguin Books, 2004, pp. xii-xviii.

⁷⁴ Jünger, *Storm of Steel* p. 81.

⁷⁵ Jünger, *Storm of Steel*, p.81; For another example of soldiers running for their gas masks, see also, A. S. Dolden, *Cannon Fodder: An Infantryman's Life on the Western Front 1914-18*, Dorset, Blandford Press, 1980, p. 150.

scared of a weapon or scenario because of ‘... how little they felt separated from the victims’, in relation to gas, Jones confirms Roper’s claim as soldiers’ appeared to take the threat of gas more seriously after viewing its victims.⁷⁶ The shock these men felt upon seeing gas victims highlights how gas could leave a permanent psychological mark upon an individual, potentially changing their habits as evident with Jünger, or extenuating their nerves towards the weapon and subsequently remaining vivid within their memories. Responses of equal intensity also arose from feelings of anger towards gas and its victims.

Anger about gas manifested either in response to witnessing the victims of a gas attack, or as a response to warfare as a whole. Canadian soldier Kenneth Foster wrote consistently negatively towards the Germans throughout his post-war memoir, revealing that he enlisted in 1915 following the sinking of ‘the good ship "Lusitania”’ by German submarines.⁷⁷ Foster stated, ‘talk about dirty tricks, Fritz had them all beat with this one’, referring to the Germans sending over irritant gas before sending ‘real’ gas. Therefore, men would be sneezing and unable to wear their masks as chlorine or phosgene gas was fired over.⁷⁸ Similarly, Ross, mentioned previously in relation to fear, expressed in 1915 that, ‘[w]e English all try to be good sports... very few realize what a hell on earth these Germans are planning for us.’ He goes on to reference the sinking of the *Lusitania*, the ‘crucifixion’ of a British sergeant to a barn door, and finally, gas. Although Ross’ words were subtler than Foster’s, the responses were fuelled by anger towards the Germans. Wider atrocity scandals associated with

⁷⁶ Roper, *The Secret Battle*, p. 247; Jones, ‘Terror Weapons’, pp. 365-66.

⁷⁷ ‘Foster, Kenneth Walter: Memoirs of the Great War 1915-1918’ *The Canadian Letters and Images Project*, <http://www.canadianletters.ca/letters.php?letterid=4502&warid=3&docid=5&collectionid=274>, accessed on 8 May 2015.

⁷⁸ This tactic is mentioned in: Cook, *No Place to Run*, p. 45.

Germany's creation and implementation of gas resulted in the belligerent nation being referred to as 'playing dirty'. This term was used to represent a sense of 'moral superiority' the British felt in comparison to the Germans, using atrocities to justify British participation in the war.⁷⁹ The credibility of atrocities taking place, particularly in Belgium, remains contested, however even if not all stories were accurate they were widely believed and contributed to the demonising of the enemy from soldiers and society.⁸⁰ This assumption is validated through Foster and Ross' accounts as both men portrayed the Germans as evil, further dehumanising the enemy. World War One had a distinctly new style of warfare.⁸¹ Gas contributed to this modern shift through the impersonal and indiscriminate attacks of the weapon, killing a man from the inside out, creating panic and uncertainty, attributing the poison as immoral.⁸² Atrocities committed by Germany within the first years of war angered men exposed to gas as they were suffering at the hands of an immoral enemy and weapon, as evident through Foster and Ross' accounts which suggested that the British were honourable fighters and the Germans playing dirty.

By mid-1916 rudimentary anti-gas training had been implemented and respirators, although basic, were administered. However, this did not ensure safety from gas. Private Charlie Byrne of the Hampshire Regiment's 2nd Battalion spoke in an interview in 1977 of a gas attack that had remained pertinent in his memory.⁸³ When

⁷⁹ See, e.g., E. Riedi and T. Mason, "'Leather' and the Fighting Spirit: Sport in the British Army in World War I", *Canadian Journal of History*, vol. 41, no. 3, 2006, p. 489; D. Monger, 'No mere silent commander'? Sir Henry Horne and the mentality of command during the First World War', *Historical Research*, vol. 82, no. 216, 2009, pp. 344-45, 351.

⁸⁰ Horne and Kramer, *German Atrocities 1914 A History of Denial*, pp. 1-3.

⁸¹ For more information on the new style of warfare see, for instance: Van Bergen, *Before my Helpless Sight*, pp. 5-7; Ashworth, *Trench Warfare*, pp. 1-7; G. Hartcup, *The War of Invention*.

⁸² E.g., Watson, *Enduring the War*, p. 33; Richter, *Chemical Soldiers*, pp. 1-5; Jones, 'Terror Weapons', pp. 363-64.

⁸³ C. Byrne, *I Survived Didn't I? The Great War Reminiscences of Private 'Ginger' Byrne*, J. Cave (ed.) South Yorkshire, Leo Cooper, 1993, pp. 66-67.

discussing the gas masks that failed during the attack, killing a majority of his company, Byrne stated, 'we was all well trained. I never remember anybody testing them to see they were serviceable. It must have been somebody's bleedin' job to see they were tested, musn't it?' Byrne described the 'poor devils' laying in the mud with 'soap-suds coming out of their mouths' as a result of their failed protection.⁸⁴ For Byrne, his anger lay with the poor quality of the equipment being administered.⁸⁵ The faulty masks referred to were P Helmets, Byrne subsequently revealed that preceding this attack in a moment of 'self-preservation' he had taken an officers helmet.⁸⁶ The officers at this time had been administered P.H.G helmets;⁸⁷ slightly more advanced than the P helmet through extra protection around the goggles.⁸⁸ This helmet coupled with Byrne's implementation of training protocol, most likely saved his life. At this stage in the war, the allied forces had begun using gas against the Germans, yet, as Byrne highlighted, protective measures were still less than satisfactory.⁸⁹ Moreover, A. Stuart Dolden, of the 1st Battalion London Scottish Regiment, complained bitterly about poorly designed equipment, criticising gas masks as when wearing them 'our eyes watered so much that we could not see out of the goggles.'⁹⁰ Dolden made this complaint during the Battle of Loos, the first British release of gas, coinciding with Byrne's frustrations as the British were developing gas to distribute while protective measures remained inadequate. For soldiers like Byrne who were unable to give aid to gas victims due to the nature of their wounds, equipment failures would have undoubtedly generated notions of anger, if not towards the allied militaries for lack of

⁸⁴ Byrne, *I Survived Didn't I?* pp. 66-67.

⁸⁵ For another example of this frustration see: A.G. Empey, *Over the Top: By An American Soldier Who Went*, New York, G.P. Putman's Sons, 1918, p. 190.

⁸⁶ Byrne, *I Survived Didn't I?*, p. 70.

⁸⁷ Cave, 'Appendix I: Reports on German Gas Attack on Night 8/9 August 1916', in Byrnes, *I Survived Didn't I?*, pp. 119-21.

⁸⁸ Macpherson et al., *History of the Great War Based on Official Documents*, pp. 340-41.

⁸⁹ Cook, *No Place to Run*, pp. 42-46.

⁹⁰ Dolden, *Cannon Fodder*, p. 28.

protection, then certainly towards the Germans for introducing such a destructive weapon.

As this chapter shows, responses to gas warfare varied from enthusiasm to extreme fear. Soldiers' responses were affected by whether or not they had been exposed to the weapon, or by what they had heard or seen of gas attacks. For those unexposed to the weapon, initially poison gas offered an exciting opportunity to break the monotony of trench life or to end stalemate. Contrastingly, as the use of gas increased throughout 1915 anxiety and fear accumulated, particularly because of inadequate protection. Furthermore, wider factors influenced the ways in which men responded to poison gas. Most notably, German atrocity scandals which circulated throughout the home front and the front line, establishing the Germans as morally corrupt and willing to 'play dirty' in order to win the war. It is clear that throughout this period gas gradually established and solidified its status as a terror weapon,⁹¹ as the men assessed within these accounts illustrated a developing or sustained fear of gas, demonstrating its diverse ability to psychologically affect a soldier. In order to test whether the status of terror weapon attributed to the weapon within this period remained consistent throughout the war, it is necessary to evaluate the later years of conflict, and examine whether improved protection or familiarity did affect soldiers responses to poison gas.

⁹¹ Jones, 'Terror Weapons', pp. 357, 375.

Panic Meets Protection: 1916-1918

The later years of the gas war were marked by increased training and refined protective measures in response to the rising use of poison gas along the Western Front. Initially, soldiers of the British forces were advised to urinate on handkerchiefs to prevent gas poisoning, by the end of 1915 cloth masks treated with chemicals replaced this improvised protection.⁹² The introduction of new gases such as phosgene in 1916 and mustard in 1917 resulted in the British army's creation and distribution of Small Box Respirators (SBR) and Germany refining the filters and materials of their thoroughly effective gas masks.⁹³ It has been suggested that the British army rushed general warfare training after 1915, yet the British as well as German and American armies made anti-gas training essential in order to prevent panic or poisoning.⁹⁴ Most commonly, officers were trained in anti-gas procedures through lectures, doctrine or practical assessments and would subsequently teach and practice anti-gas measures and routines to their companies.⁹⁵

This chapter assesses whether training, protection or greater familiarity with gas in the later years of the war enabled soldiers to cope with the psychological impact of the poison established in 1915. Regarding the war more generally, Watson proposes that

⁹² Richter, *Chemical Soldiers*, pp. 10-11; Cook, *No Place to Run*, p. 39.

⁹³ Macpherson et al., *History of the Great War Based on Official Documents*, table I, p. 271; Haber, *The Poisonous Cloud*, pp. 75-77.

⁹⁴ Headquarters American Expeditionary Forces, *Defensive Measures against Gas Attacks*, The United States of America, Berger-Levrault, 1917, pp. 6-8; Haber, *The Poisonous Cloud*, pp. 102-05. For an examination of general training for British soldiers see, e.g., P. Simkins, *Kitchener's army: The raising of the New Armies, 1914-16*, Manchester, Manchester University Press, 1988, pp. 312-18.

⁹⁵ Haber, *The Poisonous Cloud*, pp. 101-05; Headquarters American Expeditionary Forces, *Defensive Measures*, p. 7.

‘combat motivation lay in confidence in ultimate victory and personal survival’, claiming that confidence in survival greatly impacted soldiers’ capabilities to mentally endure conflict.⁹⁶ In particular reference to gas, Haber stresses that importance was placed on training and protection for British and German soldiers as, ‘if they thought they were defenceless they might panic and retreat.’⁹⁷ Both Haber and Watson advocate the importance of adequate training and protection to instil confidence and decrease psychological strain. Jones contests this through labelling poison gas a ‘terror weapon’ as the psychological effects could ‘disrupt the [soldiers’] rational evaluation of evidence and the formation of coping mechanisms.’⁹⁸ Cook states that ‘gas preyed on the weak and uninformed’ and that those who had been trained were safer in a gas attack than those who were not.⁹⁹ Ultimately, Cook appeals for the ‘fear of poison gas... not to be underestimated’ concluding that gas had a considerable psychological impact on soldiers.¹⁰⁰ This chapter evaluates the conclusions of Watson, Haber, Jones and Cook in relation to soldiers’ responses of gas during the later years of war, considering the effects of training and protection on the psychological power of gas.

Of the evidence collected for this research paper, responses that discuss gas are scarce in relation to the later years of war. Why so few soldiers recorded their feelings towards gas within the years of its increasingly extensive use requires discussion. Unlike the previous chapter, the sources analysed within this section are all of men who had been exposed to gas. Described as ‘ubiquitous on the battlefield by the end of 1917’ it is unsurprising that the responses obtained for this chapter are from men

⁹⁶ Watson, *Enduring the Great War*, pp. 141-42.

⁹⁷ Haber, *The Poisonous Cloud*, p. 41.

⁹⁸ Jones, ‘Terror Weapons’, p. 375.

⁹⁹ Cook, *No Place to Run*, p. 236.

¹⁰⁰ Cook, *No Place to Run*, p. 238.

who had experienced a gas attack.¹⁰¹ Increasingly frequent gas attacks, combined with more successful means of distribution, resulted in an increase of casualties.¹⁰² However, the limited quantity of responses with content specific to gas does not correspond with the weapons' increased potency and effectiveness throughout 1917 and 1918. The 'ubiquitous' nature of gas in the later years of war could have resulted in the initial shock of gas being forgotten, as it became a commonplace weapon along the front. When analysing some individuals this explanation would suffice. However, 'surprise and uncertainty' remained prevalent through the development of new gases and methods of delivery, a key to its military success as well as psychological.¹⁰³ The majority of responses presented within this chapter are from memoirs. It is possible that post-war materials may have focused on the first use of gas at Ypres or the British disaster at Loos due to its uniqueness in the history of the Great War. Both Van Bergen and Roper propose that psychological trauma during war could render a soldier numb to the extraordinary situations of warfare; in turn, a traumatic event may not be recorded at the time it happened but would remain 'stuck in the mind' for later recollection, thus symbolising the significance of the incident to an individual.¹⁰⁴ These conclusions could explain the lack of contemporary accounts about gas exposure during 1917-18. The increasing familiarity of gas in the war is another probable explanation as to why so few sources exist for the later years of the war. However, with increasing familiarity came the introduction of more deadly gases and more effective means to distribute the vapour, potentially perpetuating pre-existing anxieties of gas as indicated by Cook and Jones. Examining a variety of sources demonstrates the instrumental role of training and adequate protection in instilling

¹⁰¹ Palazzo, *Seeking Victory on the Western Front*, p. 113; Haber, *The Poisonous Cloud*, p. 176.

¹⁰² Palazzo, *Seeking Victory on the Western Front*, p. 113.

¹⁰³ Jones, 'Terror Weapons', p. 355.

¹⁰⁴ Roper, *The Secret Battle*, p. 254; Van Bergen, *Before My Helpless Sight*, pp. 210-14. See also: Hynes, 'Personal narrative and commemoration', p. 210.

confidence in soldiers and decreasing the psychological power of gas. It appears that when this confidence was absent or replaced by an unconcerned attitude, gas could physically as well as mentally disturb a soldier.

Second Lieutenant of the American 111th Infantry Regiment of the 28th Division, Hervey Allen, wrote bitterly of gas's effects on the men within his company, attributing gas panic as a result of overtraining.¹⁰⁵ He claimed that 'men had been taught to put the gas mask on and to give the alarm at the slightest inclination or sniff'; he noted that this was 'nonsense' as men often came into mild contact with the weapon on a daily basis.¹⁰⁶ Allen categorised this behaviour as 'gas shock',¹⁰⁷ and from assessing Allen's account; Jones concludes that gas had an apparent capability to inspire fear from its first use at Ypres, implying that the 'gas shock' Allen observed was a possible condition from the beginning of the gas war.¹⁰⁸ Allen believed that men were 'trained to believe that a light sniff might mean death.'¹⁰⁹ This was an accurate conclusion, as the United States' official doctrine issued in 1917 stated on the first page that 'in the absence of suitable protection the gases used in war are extremely deadly. Breathing only very small quantities may cause death or serious injury.'¹¹⁰ The doctrine stated the information within it was for the guidance of all men; therefore, it is understandable that Allen's comrades were fearful of gas.¹¹¹ In this instance, Allen claimed that soldiers were 'suffering from the fear of gas rather than from the gas itself.'¹¹² This contradicts studies like Watson's that propose

¹⁰⁵ R. F. Allen, 'Foreword' in H. Allen, *Toward the Flame: A War Diary*, United States of America, University of Pittsburgh Press, 1968, p. ix.

¹⁰⁶ Allen, *Toward the Flame*, p. 91.

¹⁰⁷ Allen, *Toward the Flame*, p. 92.

¹⁰⁸ Jones, 'Terror Weapons', pp. 356-57.

¹⁰⁹ Allen, *Toward the Flame*, p. 91.

¹¹⁰ Headquarters American Expeditionary Forces, *Defensive Measures*, p. 7.

¹¹¹ Headquarters American Expeditionary Forces, *Defensive Measures*, p. 5.

¹¹² Allen, *Toward the Flame*, pp. 91-3.

training was an integral aspect of combat motivation and morale,¹¹³ however, the United States doctrine repeatedly stated that through reacting quickly and appropriately the ‘perfect protection’ of gas masks would prevent gas poisoning.¹¹⁴ Haber suggests of any army fighting in France, that many officers were too lazy to rigorously implement anti-gas principles and procedures especially with ‘frequent changes of equipment and the introduction of new substances.’¹¹⁵ Even if Haber is correct, it appeared that Allen’s men were subjected to rigid training that had only perpetuated fears of gas. Another possible explanation for the ‘gas shock’ Allen described was the late entry of American soldiers in the war. Watson proposes that ‘untried soldiers displayed intense fear’ in terms of warfare more generally, and with America joining the war in April 1917 it is probable that many of their soldiers were nervous when faced with the modern warfare of the Great War.¹¹⁶ Correspondingly, propaganda as well as information circulated through civilian newspapers could have contributed to pre-war anxieties. In Allen’s instance, training perpetuated soldiers’ fears of gas instead of instilling confidence, highlighting that extensive measures taken to prevent gas poisoning could psychologically harm, as opposed to heal.

The psychological effects of gas were diverse, some men remained calm when faced with the poison while others, like Allen’s comrades, were deeply affected. British Private Charles Ward spoke of gas as merely another weapon used along the front, and retold having been gassed without even knowing during a post-war oral

¹¹³ Watson, *Enduring the Great War*, p. 141.

¹¹⁴ Headquarters American Expeditionary Forces, *Defensive Measures*, pp. 7-8, 10.

¹¹⁵ Haber, *The Poisonous Cloud*, p. 102.

¹¹⁶ R. H. Zieger, *America’s Great War: World War I and the American Experience*, Maryland, Rowan & Littlefield Publishers, Inc., 2000, pp. 50-58.

interview.¹¹⁷ His calm attitude could have been a result of passed time and the incapability of his memory to accurately remember emotions and reactions.¹¹⁸ Ward witnessed gas dropped on a soldier using the lavatory in 1918, claiming that ‘he got very frightened, rushed out into our tent shouting gas. Two of us grabbed a hold of him, tied him down on the firing step, put his gas mask on, put our own on then waited for a stretcher bearer to take him away.’¹¹⁹ Evident from Ward’s account gas’s ability to psychologically affect soldiers’ composure as late as 1918, despite effective protection. It is possible Ward retold the event to show himself in a better light than the panicked man, exhibiting his actions as a result of his mental and physical composure by contrasting them with the panicked man. When conducting a case study of one man’s war experience remembered over 70 years, Roper recognises that throughout the remembering process the man had fashioned himself, or others, as heroes in their own right, suggesting that perhaps this was a common aspect of re-remembering the war.¹²⁰ Additionally, Albert Palazzo highlights that following the first gas attack in 1915 a British official memorandum repeatedly asked officers to reiterate to their troops that ‘to panic and run meant death’ during a gas attack.¹²¹ It is possible that Ward reacted the way he did as a result of doctrine and training that repeated this notion. German Corporal Frederick Meisel of the 371st Infantry Regiment joined the war late in 1917 and recorded his experience, like Ward, years

¹¹⁷ C. Ward. Interview with R. F. O’Connell ‘Ward, Charles’ (henceforth, IWM interview), *Imperial War Museum Sound Archives*, no. 12026, 29/04/1991, Reel 15.

¹¹⁸ For a discussion of the implications of remembering and memory see for instance, Todman, *The Great War*, pp. xii-xv; Hynes, ‘Personal narratives and commemoration’, pp. 208-10; Roper, ‘Re-remembering the Soldier Hero’, pp. 198-201.

¹¹⁹ Ward, IWM interview, Reel 15.

¹²⁰ Roper, ‘Re-remembering the Soldier Hero’, pp. 198, 184-85, 200-01.

¹²¹ Palazzo, *Seeking Victory on the Western Front*, p. 46.

after the conflict.¹²² Meisel recounted a gas attack during battle in 1918 when, putting on his gas mask, he discovered that it had been damaged. He wrote,

I had seen death thousands of times, stared it in the face, but never experienced the fear I felt then... with the instinct of self-preservation uppermost, my eyes fell on the boy whose arm I had bandaged... I leapt at him and in the next moment had ripped the gas mask from his face.¹²³

Meisel's shocking revelation revealed the power gas had in affecting his psychological state purely as a result of not having effective protection. Unfortunately, further information regarding Meisel's admission is inaccessible for this dissertation, although it has been suggested that Meisel's recollection of the war had rather 'melodramatic' prose throughout.¹²⁴ This extract still remains valuable as such an outrageous admission of self-preservation that most likely caused the death of a comrade would unlikely be fabricated. Moreover, it seems surprising that such a frowned upon act would be willingly shared. Meisel's account explicitly showed gas's capability to instil fear and alter one's reason or mental state, confirming Jones and Allen's concept of 'gas shock'.¹²⁵ In this instance, Meisel's fear was a consequence of his lack of protection, also confirming Haber and Watson's suggestions that adequate protection resulted in confidence and less psychological stress. Furthermore, Meisel's response aligns with Martin's account from the previous chapter, of another soldier attempting to rip a gas mask off a comrade when he was

¹²² F. Meisel, 'Private Papers of F Meisel', *Imperial War Museum*, <http://www.iwm.org.uk/collections/item/object/1030004563>, accessed on 7 September 2015.

¹²³ F. Meisel, cited in P. Hart, *The Great War: 1914-1918*, London, Profile Books, 2013, p. 662.

¹²⁴ Imperial War Museum, 'Private Papers of F Meisel'.

¹²⁵ Jones, 'Terror Weapons', pp. 356-57; Allen, *Toward the Flame*, p. 92.

without one.¹²⁶ This demonstrates that fear of gas could remain a prevalent consequence of not being protected. Meisel's experience showed the significant psychological power of protective equipment, in turn, highlighting the underlying presence of gas fear that was exhibited when facing the weapon ill-prepared. The man described by Ward panicked from being unmasked when exposed to gas, echoing the fear and loss of reason evident from Meisel's account of a similar situation. However, Allen and Ward were not psychologically disrupted by the weapon, a possible result of training and confidence but most likely due to their past experiences with gas resulting in no physical effects.¹²⁷ Arguably, this past exposure coupled with effective gas masks resulted in the men remaining psychologically unaffected by poison gas.

Confidence in anti-gas equipment and training was instrumental in sustaining troop morale. The absence of accounts detailing experiences with gas could have resulted from successful protection inspiring confidence in the men, therefore, an attack could lose its significance and not be recorded. As previously mentioned, Watson suggests that there was a powerful connection between confidence, protection and combat motivation. He explains further that instilling confidence in soldiers' 'personal survival and in their ability to execute military tasks effectively' constituted 'good morale'.¹²⁸ When applying this to the context of gas, it is evident that confidence in both military success as well as personal safety could reduce the anxiety of exposure to gas. For instance, Frederick Holmes, a machine-gunner of the British 12th Lancers, experienced his first gas attack in November 1917 after two years of service. Holmes

¹²⁶ For this account, see above, p. 22.

¹²⁷ Allen referred to being in close proximity to gas on multiple occasions and sustaining no injuries, Allen, *Toward the Flame*, p. 91.

¹²⁸ Watson, *Enduring the Great War*, pp. 140-41.

described in a post-war interview the ‘original’ cloth gas mask as ‘awful’.¹²⁹ The cloth masks Holmes referenced were P-Helmets, a chemically treated cloth bag treated with eye goggles and a tube breathe through, administered in November of 1915 to protect against chlorine or lachrymator gases.¹³⁰ Arthur Empey, who fought with the British from 1916, described the P-Helmet as ‘at the best a vile-smelling thing, and it is not long before one gets a violent headache from wearing it.’¹³¹ Following a chlorine cloud attack in 1917, Holmes ‘suffered no ill effects at all’, which he attributed to the ‘comfortable’ new gas masks: ‘I was confident it would keep the gas out.’¹³² By this time British troops had been administered with SBRs that were highly effective by filtering the poison as opposed to absorbing it, and following their distribution it was believed that gas shell attacks were introduced by the Germans to combat the effectiveness of the SBR.¹³³ Although this myth was later debunked, Holmes’ confidence in the SBR reflected the protective success of the respirator; subsequently, it remained the only form of respirator for British troops until the end of the war due to its success.¹³⁴

Holmes’ account illustrated a calm response to gas, as a result of confidence from his SBR. Similarly, Byrne who expressed anger towards the lack of training of his comrades and faulty gas masks in the previous chapter,¹³⁵ displayed confidence in his safety through the training he had received for the P-Helmet. Byrne recalled information from his training that reminded him to ‘keep upwards from gas, don’t get

¹²⁹ F. Holmes. Interview with P. Hart. ‘Holmes, Frederick William Henry (IWM interview), *Imperial War Museum Sound Archives*, no. 9147, 1985, Reel 7.

¹³⁰ Macpherson et al., *History of the Great War Based on Official Documents*, table I, p. 271; Cook, *No Place to Run*, pp. 42-44.

¹³¹ Empey, *Over the Top*, p. 190.

¹³² F. Holmes, IWM interview, Reel 7.

¹³³ Macpherson et al., *History of the Great War Based on Official Documents*, pp. 271, 288; Palazzo, *Seeking Victory on the Western Front*, p. 43.

¹³⁴ Haber, *The Poisonous Cloud*, pp. 99-101.

¹³⁵ For this account see above, p. 26.

down low and you kept your arms up... to stop it creeping up your clothes' adding, 'I reckoned if I kept a cool head, kept my presence of mind, I'd be all right.'¹³⁶ This confidence in his gas mask was most likely a result of acquiring an officer's PHG Helmet before the attack, providing him with more protection than his comrades.¹³⁷ A report of the attack suggested that the P Helmet's his comrades had were partly to blame for their deaths, and they were also not following training protocol when the attack began, unlike Byrnes.¹³⁸ Byrne and Holmes' accounts reflect Haber and Watson's claims of the importance of training and protection in establishing confidence in survival. Holmes' interview was conducted in 1985; consequently, issues arise with what he had remembered, as Dan Todman emphasised, 'history is not what you thought. *It is what you remember.*'¹³⁹ Throughout his interview, Holmes recalled moments of feeling anxious or fearful, particularly in regards to German bombs, indicating that his relaxed attitude to his first gas attack was most likely genuine rather than poorly remembered.¹⁴⁰ Haber claims that for some 'anti-gas training... raised confidence and so maintained or even boosted morale' yet, paradoxically, training could also cause 'widespread apprehension.' According to Haber, this apprehension would be dispersed following exposure to gas, as protection would mentally and physically secure a soldier.¹⁴¹ Evidently, of the men assessed, particularly Holmes, Haber's statement regarding increased confidence or morale is validated. For soldiers like Holmes, who had no previous experience with gas but was comfortable and confident with the administered gas mask, similar to Byrne with

¹³⁶ Byrne, *I Survived Didn't I?*, p. 66.

¹³⁷ Byrne, *I Survived Didn't I?*, p. 70; Macpherson et al., *History of the Great War Based on Official Documents*, pp. 340-41.

¹³⁸ Cave, 'Appendix I: Reports on German Gas Attack on Night 8/9 August 1916', in Byrnes, *I Survived Didn't I?*, pp. 119-21; Byrnes, *I Survived Didn't I?*, pp. 66-67.

¹³⁹ Todman, *The Great War*, p. xiii.

¹⁴⁰ For instance see: Holmes, IWM interview, Reel 1 and 7.

¹⁴¹ Haber, *The Poisonous Cloud*, p. 105.

adequate training, an overall confidence in the face of gas could have been established. This confident or calm response to gas could also explain the scarcity of contemporary records of later gas attacks. However, two contemporary accounts reveal that an indifferent attitude following a gas attack was not unlikely.

Distinguished poet and composer, Ivor Gurney, was gassed on 12 September 1917 at the battle of Passchendaele. Writing to his friend Marion Scott after his gassing, Gurney commented on the new odourless gas that he found less frightening than older gases whose smell was ‘full of danger.’¹⁴² Suggesting that for Gurney, fear of gas was connected to its physical presence; the potential psychological terror of not knowing you were a victim of a gas attack was apparently of little significance to him. After being gassed, Gurney noted, ‘it is just (or was) as if I had had catarrh’, this sentiment was reinforced after five days of hospitalisation when he wrote to Marion, ‘being gassed (mildly) with the new gas is no worse than catarrh or a bad cold’.¹⁴³ Describing his injuries as minor would suggest that Gurney was not gassed heavily, potentially resulting in the effects of poisoning not being as horrific as he may have heard. However, his emotionally restrained letters could also have resulted from not wanting to worry Scott as she was a close friend and imbedded in helping him further his musical and poetry career.¹⁴⁴ Gurney’s mental health before entering the war has been described as unstable and it has been suggested that his post-war mental deterioration and subsequent death was influenced by the emotional trauma he

¹⁴² I. Gurney, ‘Letter to Marion Scott, 12/09/1915’, in *Ivor Gurney War Letters*, R.K.R Thornton (ed.), London, The Hogarth Press, 1984, p. 198 (Henceforth, Gurney Letter).

¹⁴³ Gurney Letter, 12/09/1917, p. 198.

¹⁴⁴ Thornton, *Ivor Gurney*, p. 18. For discussion of self-censorship to spare family members worry that was most common in British soldiers see, e.g. Hanna, ‘A Republic of Letters’, pp. 1356-1360.

sustained throughout the war.¹⁴⁵ So perhaps pre-existing mental strain contributed to Gurney's relaxed reaction to poison gas or at the very least affected the way he wrote to Scott, as to not signify further psychological stress. Interestingly, he wrote, 'how long will it last? Couldn't say, but not so long as I would wish.'¹⁴⁶ It appears that Gurney's greatest concern was remaining in hospital, or better, being sent home rather than returning to the front. These notions were evident in his letter to Scott on 14 April 1917 when revealing his recent shoulder injury: 'well, I am wounded: but not badly; perhaps not badly enough... I do not yet give up hopes, but very few boats have been running lately... and the serious cases go first'. Gurney may have been implying a desire to leave the medical tent he was in and move to a hospital or, potentially, home.¹⁴⁷ This response was not uncommon among soldiers weary of battle or longing to return to civilisation, and an injury severe enough was capable of allowing this.¹⁴⁸ In Gurney's case it appeared he did not view gas or its physical effects as frightening, but rather a means to escape warfare, highlighting that it was plausible for some men to remain preoccupied with more significant internal issues than with gas.

Another possible explanation for men to have remained composed or unbothered regarding gas was their desire to perpetuate the image of a brave and masculine soldier, as discussed in the previous chapter. New Zealand Private George Tierney of the Medical Corps at Passchendaele received an 'almost fatal dose of mustard gas' on 28 November 1917. Tierney noted in a letter to his parents that as he began vomiting

¹⁴⁵ W.H. Trethowan, 'Ivor Gurney's Mental Illness', *Music & Letters*, vol. 62, no.3/4, 1981, pp. 300-01.

¹⁴⁶ Gurney Letter, 17/09/1917, p. 199.

¹⁴⁷ Gurney Letter, 14/04/1917, pp. 153-55.

¹⁴⁸ For further discussion see, e.g. Roper, *The Secret Battle*, pp. 245-46; Bourke, *Dismembering the Male*, pp. 83-89; van Bergen, *Before My Helpless Sight*, pp. 232-36.

he ‘came to the conclusion that I had a slight dose of gas’ although based on the injuries he described this was a gross underestimation.¹⁴⁹ He later stated that ‘I began to realise... that I was dangerously ill, but all the way through I felt perfectly confident that I’d pull through all right.’¹⁵⁰ Evidently, Tierney did not appear panicked in regards to his injury, potentially reflecting his place in the Medical Corps, as he was most likely aware of the available treatments and likely outcomes of gas poisoning. One line in the letter, however, indicated that there may be another influencing factor to his calm response. He wrote, ‘They put a bandage around my eyes, and the agony was awful (this is between you and I) – It was as though my eyes were full of sand’.¹⁵¹ This statement is not within character to the rest of his letter as it is the only line in which he expressed emotion or commented on pain. Within the wider context of soldier masculinity, Tierney could have been withholding information in order to preserve his image at home.¹⁵² Similarly to Gurney, it is probable that Tierney did not want to worry his loved ones, particularly when writing to his parents. From a preliminary analysis, Martha Hanna suggests that letters sent home by British troops were ‘marked by emotional reserve’.¹⁵³ And although Tierney was a New Zealander, at this time New Zealand was closely aligned with Britain and ‘New Zealanders’ would often identify as British. Therefore, it is possible the same conclusions drawn for British soldiers could, at times, also apply to New Zealanders.¹⁵⁴ Furthermore, Roper proposes that when writing home soldiers would consciously try to conceal how ‘they really felt’ as they were unable to comprehend

¹⁴⁹ G. Tierney, ‘Letter to Mother and Father, 28/11/1917’ in G. Harper (ed.) *Letters from the Battlefield: New Zealand Soldiers Write Home 1914-18*, Auckland, HarperCollins Publishers, 2001, pp. 116-23.

¹⁵⁰ Tierney, ‘Letter to Mother and Father’, pp. 116-23.

¹⁵¹ Tierney, ‘Letter to Mother and Father’, pp. 116-23.

¹⁵² See Meyer, *Men of War*, pp. 4-10; Meyer, ‘Gladder to be Going Out Than Afraid’ p. 196.

¹⁵³ Hanna, ‘*A Republic of Letters*’, p. 1359

¹⁵⁴ M. King, *The Penguin History of New Zealand*, Auckland, Penguin Group, 2003, p. 293.

what was happening around them or not to worry family.¹⁵⁵ For Gurney and Tierney, not wanting to worry family members who were undoubtedly aware of the injuries inflicted during the war, if not specifically aware of gas's effects, were potentially decisive factors in what they chose to include in their letters. Interestingly, Gurney and Tierney's accounts are the only contemporary responses within this chapter. When discussing soldiers' concealment of information in letters, Roper further proposes that 'retrospective accounts are generally more reflective about the emotional experience of war than the letter or diary' and he suggests that 'time was needed before a coherent narrative could be constructed.'¹⁵⁶ Roper's argument seems to be reflected by the lack of contemporary sources for this section, suggesting that men only began to process and understand their experiences with gas, paying particular attention to the role of training, equipment, or psychological strain, in their post-war recollections of gas attacks.

Through a study of various soldiers' responses to the war between 1916-18, this chapter examined the effectiveness of training and protection to help men cope with the psychological impact of poisonous gas. Men such as Holmes, Gurney, Tierney and Ward illustrated a calm response to gas attacks or gas injuries sustained in the later years. Holmes in particular suggested that this was a direct result of confidence in his administered gas mask. Gurney and Tierney do not mention training or protective measures in relation to their experiences and this could be a result of the men both being gassed. For unknown reasons, neither of the men were protected at the time of their attack; therefore their responses were written after experiencing gas poisoning, and as both men claimed the experience was not as bad as would have

¹⁵⁵ Roper, *The Secret Battle*, pp. 21-2. For further discussion see, e.g. Jones, 'The Psychology of Killing', pp. 233-34.

¹⁵⁶ Roper, *The Secret Battle*, p. 21. See also, Hynes, 'Personal narrative and commemoration', p. 210.

been expected, fear of gas had apparently dispersed due to their exposure. Confirming Haber's claim that gas was not as horrific as men believed. However, men such as Meisel, and the soldiers referred to by Allen and Ward suggest that in some instances Jones and Cook's arguments of the psychological power of gas throughout the war were somewhat validated. Interestingly, Allen and Meisel's recounts of fear during gas attacks resulted from fear induced through overtraining, and self-preservation due to faulty protection. This displays the significant role training and gas masks did play in helping, or perpetuating psychological fear. Overall, the importance of protection and training is made evident throughout this chapter. Fear and anxiety toward gas, paramount throughout the first chapter, gradually reduced as a result of anti-gas measures. However, a dependence on this protection created a paradox. As without protection, gas's capabilities to psychologically impact a man are apparent. Although protection instrumentally decreased fear of gas through establishing confidence in an individual's safety, as soon as this security was absent, poison gas's ability to instil terror and panic prevailed.

Conclusion

An analysis of soldiers' responses to poisonous gas demonstrates the weapon's ability to instil and sustain psychological fear in men along the Western Front. Through examining the gas war by its early then late stages, clear shifts in the responses highlight the increasing power of protection and training to decrease anxieties and panic that had been established in 1915 with the introduction of gas to the war. Although protection significantly contributed to the decreasing psychological power of gas, its overall impact remained lingering and significant, surfacing when vulnerable men without protection met with the poison. Encapsulating h

This study demonstrates the wealth of knowledge obtainable from primary sources, encapsulating human experiences to illustrate the essence of what fighting against gas was like as well as fighting against ideological concepts.

This dissertation adds to current scholarship of the psychological consequences of poisonous gas during the war through offering a broad analysis of soldiers' attitudes from various nationalities, backgrounds and levels of exposure to suggest that, overall, gas established and retained its name as a 'terror weapon.' Richer understandings of wartime masculinity have been explored throughout this paper, with the analysis presented here contributing knowledge of how gas could, and did, alter fundamental masculine ideals. Exemplified also, are the connections between self-preservation and comradeship exploited by gas, illustrating the power of gas to

drastically alter an individual's emotions and actions. Adding a more refined case study of poisonous gas to scholarship of soldier experience offers further insight into the connection between psychological strains and overall soldier experience. Conclusions made by Jones and Cook suggest that gas instilled deep-rooted fear within men and had the ability to sustain this psychological presence well into post-war years, their arguments have been tested throughout this study.¹⁵⁷ Their claims have been validated through chapter one of this study, as an inherent fear of gas gradually intensified throughout 1915. However, Watson and Haber's studies promoting the power of training and protection in diminishing fear and increasing confidence gained predominance in the later years of the war.¹⁵⁸ Examining these conclusions through different times of the war demonstrates that in 1916-1918 previously established fears of gas were dispersed through training and protection; however, psychological fear remained present - as evident when men were vulnerable and unprotected during a gas attack.

¹⁵⁷ Jones, 'Terror Weapons', pp. 355-57; Cook, *No Place to Run*, pp. 237-38.

¹⁵⁸ Haber, *The Poisonous Cloud*, pp. 102-05; Watson, *Enduring the Great War*, pp. 140-41.

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