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Honours Dissertation

Women's Work in Munitions Factories during The First World War: Gender, Class and Public Opinion.

by

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Abbreviations

- WMRW Weekend Munitions Relief Workers
- TNT- Trinitrotoluene
- YMCA- Young Men's Christian Association
- YWCA- Young Women's Christian Association
- ASE- Amalgamated Society of Engineers

Introduction

The First World War and the introduction of conscription in Britain created a chronic labour shortage which women were required to fill. The surge in demand for armaments production resulted in a demand for women to enter the munitions industry, as is well known. The story of their contribution to the war effort is well documented in primary and secondary sources, but several myths have grown up around this subject that do not always correspond to the reality of women's experiences within the factories during wartime.

This dissertation aims to explore how the experiences of female munitions workers were affected by class, gender and their changing image throughout the war. It will reassess the traditional view of war being liberating for women, as they were liberated to access 'male' roles, but paternalism and a sense of intrusion into male roles was constantly reinforced to remind them that their societal role remained a traditional female one. Class divisions were also present within the munitions communities. A woman's wealth affected her position inside and outside of the factory, meaning workers had to negotiate a complex hierarchy according to their gender, class, and role within the factory. Munitions workers did not just complete their shift then were free to do as they pleased, the label of being a munitions worker and the importance of their work meant that they were subject to intrusions and tensions in all aspects of their life. For women working in munitions their role came with a plethora of restrictions, reiterating that their role in munitions factories, just like in wider society, was subject to class and gender.

Historical works that currently exist on women's war work focus on whether war was a watershed for women and if they achieved liberation. Gail Braybon and Penny Summerfield's *Out of the Cage* is a key study of female experience in wartime, they argue that there was 'continuity

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in women's position at work and in the home'.¹ The munitions factories are an interesting case study to assess whether women experienced any longstanding change or freedom during war. Works such as Arthur Marwick's *Britain in the Century of Total War*, argues that 'war gave emancipation to women' with them gaining independence by working away from home, such as in the colonies of munitions workers.² Claire Culleton also suggests women enjoyed increased independence during the war because of an 'unaccustomed lack of male presence, supervision and authority'.³ Braybon later revised the subject, arguing that war was not a watershed, and 'Society had not been "transformed" as a result.⁴ Braybon further suggests that a 'mythology' surrounds women's war work, which regards women as being 'recruited eagerly by employers, and...left willingly' post-war, but Braybon insists women workers were actually 'recruited reluctantly, and...made redundant as soon as possible'.⁵

Angela Woollacott is the leading figure in the analysis of female munitions workers with her book, *On Her Their Lives Depend*, however, this was published over ten years ago and the subject is ready for new analysis. Woollacott's main argument is that munitions work was a positive experience for women, giving them 'unprecedented mobility and financial autonomy...fostering ambition, independence, and assertiveness' and therefore somewhat endorsing the perception of war as being a watershed for women.⁶

This study relies heavily upon first-hand accounts from munitions workers to explore the experiences of women within the munitions factories, but accounts have been used in conjunction with newspaper articles, government documents and reports to give a full view of

¹ Gail Braybon and Penny Summerfield, *Out of the Cage: Women's Experience in Two World Wars* (Abingdon: Routledge, 2013), pp.286-7.

² Arthur Marwick, *Britain in the Century of Total War: Peace and Social Change 1900-1967* (London: Penguin Books, 1970), pp.106-108.

³ Claire Culleton, *Working-Class Culture: Women and Britain 1914-1921* (Basingstoke: Macmillan, 2000), pp.17-18.

⁴ Gail Braybon, *Women Workers in the First World War* (London: Routledge, 2013), p.216.

⁵ Ibid, p.229.

⁶ Angela Woollacott, *On Her Their Lives Depend: Munitions Workers in the Great War* (Berkeley: University of California Press, 1994), p.215.

female munitions work. Oral and autobiographical testimonies can reveal personal experiences that statistics and documents do not always convey, as well as underlining the emotions and feelings of the munitions workers.⁷ However, as with all oral testimonies, there are issues with accuracy and the potential influence of the interviewer with leading questions. Some first-hand accounts do not explicitly state the class of the worker, therefore, their social position is inferred by background details such as, education, employment status and family composition. Some of the sources used are recollections from munitions workers, recorded by the Imperial War Museum, and there can be issues with the accuracy of recalling details, to combat this numerous accounts have been referred to throughout the study to obtain a clearer image of women's experiences.⁸ Most of the interviews of female munitions workers used were recorded in the 1970s, reflecting the British use of oral history in that time to reflect the experiences of the working classes, as well as the second-wave feminist movement which also aimed to highlight the activities of women throughout history, such as the munitions workers of the First World War.⁹

Chapter one explains events which led to women being encouraged into munitions factories en masse. It addresses the timing of women's entrance into munitions, as they did not simply enter at the outbreak of war. The chapter outlines women's specific roles within munitions and reveals how class and gender affected the roles accessible to women.

Chapter two analyses the welfare facilities inside and outside the munitions factories, examining the impact of in-factory provisions, health and safety facilities, accommodation and leisure activities on women workers. The chapter assesses how women's experience of welfare offered was affected by class and gender. It argues that despite welfare appearing beneficial, it could exacerbate gender and class tensions, as well as facilitating the extension of paternalism

⁷ Alistair Thomson, 'Unreliable Memories? The Use and Abuse of Oral History' in William Lamont(ed.), *Historical Controversies and Historians*, (London: Rutledge, 1998), pp.23-5.

⁸ Ibid.

⁹ Ibid.

into women's lives, demonstrating the lack of trust society had in women as being responsible individuals and the continuation of patriarchy within factories.

Chapter three focusses upon the perceptions of munitions workers, looking at various groups and time periods to analyse how the perception of female munitions workers varied. The chapter analyses the impact of gender and class upon munitions workers' image. It argues that there was growing tension between middle and working class women and also between the sexes, as men saw women as less effective workers and intrusive to a male area of work. Furthermore, it highlights a timeline to the perception of females, which varied throughout the war according to how desperate the state was for female labour.

<u>Chapter 1</u> Doing their bit: 'We are ready to serve and make every sacrifice to win this war'¹

Entrance into munitions

When war officially broke out in 1914 there was not an immediate mass exodus of men and a subsequent influx of women into munitions factories. The process was delayed and key events pressured a shift in the composition of the workforce. Frank Bradbury, a munitions worker at Greenwood and Batley factory in Leeds from 1912 to 1919, claimed that at the beginning of the war there were only 100 girls making cartridges in his factory, who were confined to a separate area.² Agnes Borthwick was also a munitions worker.³ She was highly educated, gaining a degree in English and having researched in universities in America until the outbreak of war, she entered munitions in November 1915, training at Woolwich Arsenal.⁴ By 1916 she had become a forewomen in a munitions factory in Georgetown-by-Paisley.⁵ She too echoed Frank Bradbury's experiences claiming that within her factory by January 1916 there were 24 girls employed, carrying out traditionally feminine duties of cleaning the shop floor, but by December 1916 there were over 4000 girls present.⁶ The Ministry of Munitions was created in May 1915, with David Lloyd George heading the organisation.⁷ The need for a government department dedicated to munitions came out of the repeated criticism of lack of progress. Public figures such as Sylvia Pankhurst claimed 'munitions were inadequate' and recalled that the government were attacked for 'lack of forethought' and

¹ 'Women and War Work: Mr Lloyd George and the Government's Desire', *The Manchester Guardian*, 19th July 1915.

² Frank Bradbury, Recorded 01/07/1975, *Imperial War Museum*, Catalogue Number 675, Reel 1.

³ Barbara McLaren, *Women of the War* (London: Hodder and Stoughton, 1917), pp.29-30.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid, pp.30-31.

⁷ L.K.Yates, *The Woman's Part: A Record of Munitions Work* (London: Hodder and Stoughton, 1918). p.7.

'inefficiency' with regards to munitions.⁸ The government even acknowledged the initial shortcomings, with Lloyd George stating that although 50,000 women worked in munitions by July 1915, Germany had mobilised over half a million women.⁹ Britain's drive to get women into munitions was therefore stunted in the initial stages compared to other European states.

The drive to get women into munitions did not intensify until after the 'Shell's Scandal' in May 1915, in which the poor progress made by the troops on the Western Front was blamed on the lack of armaments.¹⁰ The establishment of the Ministry of Munitions and the 'Right to Serve' march, where thousands of women petitioned the government to let them participate in war industries, facilitated women's entrance into munitions.¹¹ Many working-class women became free from their peacetime employment to undertake war services, as war stimulated a decline in non-essential industries, such as textiles, causing around 50,000 unemployed women by March 1915.¹² By the end of 1915 the 'great munitions push' was under way within Britain, and women were best placed to be recruited into wartime roles.¹³ Conscription began in January 1916 and created further demand for female workers within essential war industries such as munitions.¹⁴ Women became part of the 'dilution scheme' replacing skilled men by splitting their jobs into several semi-skilled or unskilled tasks that numerous women could undertake.¹⁵ It was the combination of ammunitions shortages, campaigns for women's war work and employment schemes which enabled an influx of women into munitions after 1915. An estimated 900,000 women were working in munitions by the end of the war.¹⁶ Joan Williams, a munitions worker in Chiswick from 1915 to 1919, claimed that after one year

⁸ E.S.Pankhurst, *The Home Front: A Mirror to life in England during the First World War* (London: Hutchinson, 1987), p.155.

⁹ 'Women and War Work', *The Manchester Guardian*.

¹⁰ Wayne Cocroft., 'First World War Explosives Manufacture: The British Experience', in Macleod, Roy, and Allan Johnson, Jeffrey, (eds.), *Frontline and Factory: Comparative Perspectives on the Chemical Industry at War 1914-1924* (Dordrecht: Springer, 2006).p.36.

¹¹ 'Women and War Work', *The Manchester Guardian*.

¹² Martin Pugh, *Women and the Women's Movement in Britain 1914-1999* (Basingstoke: Macmillan, 2000), p.18.

¹³ Culleton, Working-Class Culture, p.29.

¹⁴ Ibid, p.3.

¹⁵ Ibid.

¹⁶ Ibid, p.1.

of working at Gwynnes factory, the amount of female workers increased from 'a few dozen...[to] hundreds'.¹⁷ Frank Bradbury also confirmed the increase, stating that it was only in 1916 that women became visible on the shop floor, due to their increase in numbers in munitions factories across the country.¹⁸ Women were encouraged into munitions factories in large numbers out of necessity, when there was an increased pressure upon the government, due to shell and labour shortages, rather than a change in attitudes towards the view of women workers. Sylvia Walby defines patriarchy as women being 'dominate[d], oppress[ed] and exploit[ed]' by men, this can clearly be seen within munitions factories where women continued to be in subordinate positions and exploited as a labour force by the state, only deeming them capable workers when they had little other alternative.¹⁹

The 1915 Munitions War Act gave the government control over munitions factories as well as supress the munitions trade unions for the benefit of the war-effort in such as high priority industry, giving the government allowance to be highly involved in the munitions industry and further the lives of the workers.²⁰ The use of schemes such as the dilution scheme, where skilled men were able to be removed from the work force by breaking their role down into several unskilled or semi-skilled jobs that women were deemed capable of doing, devalued women's work in munitions factories. From the onset of the war women were regarded as only capable of partially filling a man's role, rather than the whole skilled job. The eventual employment of female munitions workers exemplifies the Atkinson model of sexual division of labour, with women being peripheral workers, working for short periods of time, such as the First World War, and were generally given semi-skilled or unskilled roles as they entered munitions according to societal demand rather than

¹⁷ Joan Williams, *A Munition Worker's Career at Messrs Gwynne's-Chiswick*, 1915-1919, Adam Matthew First World War Archive, p.20,

[[]http://www.firstworldwar.amdigital.co.uk/Documents/SearchDetails/IWM_23_41_3_WJ#Snippits], Accessed 14/12/2015.

¹⁸ Frank Bradbury, *Imperial War Museum*, Reel 2.

¹⁹ Sylvia Walby, *Theorizing Patriarchy* (Oxford: Blackwell, 1990), pp.19-20.

²⁰ Woollacott, On Her Their Lives Depend, p.29,

being permanently present.²¹ Therefore women moved into 'male' jobs but were not necessarily emancipated because of their status as peripheral workers, they simply moved out of the 'private patriarchy' of their husbands and fathers who were conscripted, and into 'public patriarchy' of munitions factories with its paternalistic atmosphere, working as secondary workers and still subordinated because of their gender.²²

What was 'their bit'?

Women in munitions factories filled a variety of roles, however, some were more accessible to higher class women. The most common roles filled by women included turners, cartridge girls and fillers. Turners, included Joan Williams, her work consisted of 'roughing out...on a lathe...turning the work down to within a millimetre...required and then leaving [the shell] to be finished by more skilled operators'.²³ Frederick Kellaway, the Parliamentary Secretary to the Ministry of Munitions, stated that turners did 'work where the thousandth...of an inch [was] a vital matter'.²⁴ Women became skilled in filling different size cartridges and shells, Elsa Thomas a munitions worker at Barnbow from 1916 to 1918 and later forewoman, was taught at Woolwich Arsenal to fill 'Queen Elizabeth' shells, which were 18 inches.²⁵ Therefore women were doing highly skilled and precise work, but not necessarily given the recognition for it because they were classed as semi-skilled workers under the dilution scheme.

Apart from roles for women on the shop floor, a hierarchy of female munitions workers was also created, roles including forewoman, welfare supervisor and lady superintendent, all demanded higher status. Sylvia Pankhurst claimed 'well-to-do women were put in as over-lookers at superior wages to supervise ordinary workers'.²⁶ Forewomen directly oversaw women on the factory floor, welfare supervisors were responsible for all aspects of female workers' lives both inside and outside

²¹ Sylvia Walby, *Gender Transformations* (London: Routledge, 1997), pp.64-66.

²² Walby, *Theorizing Patriarchy*, pp.23-24.

²³ Joan Williams, A Munition Worker's Career, p.15.

²⁴ McLaren, Women of the War, p.51.

²⁵ Elsa Thomas, Recorded 15/01/1975 *Imperial War Museum*, Catalogue Number 676, Reel 3.

²⁶ Pankhurst, *The Home Front*, p.207.

the factory where there well-being was concerned.²⁷ Lady superintendents or lady supervisors were one of the highest positions women could achieve within munitions, they were involved in the recruitment and allocation of women, as well as their general discipline and welfare, including that of forewomen and welfare supervisors.²⁸ Elsa Thomas labelled herself a forewoman, she attended a boarding school for ladies in Leeds, suggesting she was a higher class woman.²⁹ Subsequently she was given a higher status role within Barnbow munitions factory, and conformed to the perception of a hierarchy within munitions factories according to class.³⁰ Middle and upper class women were only thought to constitute one percent of workers in munitions factories, but they dominated the hierarchy and role of Weekend Munitions Relief Workers (W.M.R.W).³¹ Sylvia Pankhurst claims that 'Shell making had become the latest Society craze' with upper class girls undertaking [it] as a passing fad.³² Even when the WMRW's were training they received 'a charming house' with all food and services included for 15s 6d per week, whereas, the workers they replaced only earned 14s per week and could not acquire such accommodation.³³ Therefore, the roles women were given within factories were subject to class differences, as well as gender, impacting upon their whole experience within the munitions industry.

²⁷ Elizabeth Gore, *The Better Fight: The Story of Dame Lillian Barker* (London: Geoffrey Bles, 1965), pp.79-82.

²⁸ Ibid, p.64.

²⁹ Elsa Thomas, *Imperial War Museum*, Reel 3 and Reel 4.

³⁰ Ibid.

³¹ Alan Simmonds, Britain and World War One (Hoboken: Taylor and Francis, 2013), pp.133-4.

³² Pankhurst, *The Home Front*, p.207.

³³ Ibid.

Chapter 2

Welfare of munitions workers in the factory, in the dormitory and in the club: 'Caring for the workers inside the factory but also providing outside factory safeguards needful for their health and morals'¹

The Ministry of Munitions deemed the welfare of munitions workers to be so important that it created a specific department, tasked with 'securing a high standard of conditions for all workers...especially for the women'.² From the beginning the precedent had been set to differentiate between the sexes, creating tension. Lucy Noakes insists total war has 'the potential to highlight and challenge divisions of both gender and social class', munitions factories exemplify this ideology.³ Every worker, especially females, had intrusions into their lives by the factories and state, under the pretence of maintaining high outputs. But underlying motivations to control women's lives in unfamiliar 'male' environments also seem apparent. Welfare provisions in munitions factories were meant to be beneficial to workers, however, when further analysing them, class and gender tensions emerge.

The welfare of munitions workers can be divided into four main sections, in-factory provisions, the health of munitions workers including safety precautions and working hours, living accommodation, and leisure activities offered to workers. Within all of these sections, class and gender tensions are revealed, either through the extension of paternalism, displaying that women were still deemed irresponsible by society, or differences in living standards, position within the hierarchical structure of the factory or eating facilities simply because of the class or wealth of a

¹ Ministry of Munitions, *Health of the Munitions Worker*, (London: HMSO, 1917), p.119.

² Yates, The Woman's Part, pp.37-38

³ Lucy Noakes, 'Demobilising the Military Woman: Constructions of Class and Gender in Britain after the First World War', *Gender and History*, Vol.19, No.1 (2007), p.143.

worker. Marwick thinks 'war gave emancipation to women', in the context of female munitions workers many women were able to enter typically male employment, but, their experience was not fully liberating, gender and class prejudices were present, in some cases the munitions factory could even exacerbate tensions by altering the provisions available to workers depending on their gender and wealth.⁴

Factory provisions

The introduction of welfare supervisors was a famous provision within munitions factories, the role was created after the large influx of female workers, with an estimated 700,000 women working in munitions by 1917.⁵ By mid-1915 there was a pressure to increase shell output, and it became apparent that females would be responsible to address this call being the 'national reserve of labour' left in the country.⁶ Elsa Thomas claimed that welfare supervisors were employed once the munitions factory she worked in had more women employees, suggesting welfare supervisors were created by the Ministry of Munitions specifically to look after female munitions workers.⁷ The Ministry of Munitions outlined general duties for welfare supervisors which included; 'Engagement of workers', recording every worker, reporting any sickness or decrease in output, any dismissals of women, ensuring working conditions were appropriate, closely supervising women on nightshifts, visiting workers at home if necessary, maintaining good food and housing facilities, and recreation activities were provided.⁸

Lillian Barker is one of the most famous lady supervisors for her ground-breaking work in munitions, and carried out a similar role to the welfare supervisors as she prioritised the welfare of her workers.⁹ Well-respected by workers and colleagues, her niece, who recorded her life, said that her 'approach to the girls was an intensely personal one...when a girl came to see her she could not

⁴ Marwick, *Britain in the Century of Total War*, p.108.

⁵ McLaren, *Women of the War*, pp.50-51.

⁶ Ibid, p.117.

⁷ Elsa Thomas, *Imperial War Museum*, Reel 5.

⁸ Health of the Munitions Worker, pp.110-114.

⁹ Elizabeth Gore, *The Better Fight*, p.72.

only recall her name and number, but also her shop [and] details of her background'.¹⁰ Lillian Barker worked at Woolwich Arsenal and was often noted for taking the time to go around the huge factory checking on her workers' welfare and the factory environment.¹¹

The amount of areas welfare supervisors and lady supervisors could legitimately access within a worker's life displays a 'new kind of interventionist state' that Alan Simmonds insists emerged after the influx of female workers into munitions factories.¹² The Ministry of Munitions insisted that 'the appointment of Women Welfare Officers was urgently necessary in all cases where women [were] employed', but, only recommended a welfare officer be appointed for males 'in any factory where 100 boys...[or] 500 men were employed'.¹³ Clearly women were deemed more in need of supervision than men or even boys, as there was no numerical value of female workers in a factory before a welfare supervisor was needed, it was simply assumed that all women required supervision. Welfare supervisors appeared to be the moral guardian of the women, but as Cathy Hunt highlights, these women were employed by the factory, not simply fulfilling a philanthropic duty, as essentially they had to ensure output remained high.¹⁴ The intrusion of welfare supervisors into vast areas of specifically female workers' lives suggests that women were deemed the weak-link in the factory, needing support to remain efficient workers, it was not the 'passport for toleration and respect' for women which some accounts and propaganda portrayed.¹⁵

The type of women able to access the higher role in the factory of a welfare supervisor were mainly middle-class, this reveals the class tensions present within munitions factories.¹⁶ Elsa Thomas attained a managerial position in Barnbow factory, she was of a higher social class, attending boarding school and remained in education until she was 16, which would not have been achievable

¹⁰ Ibid.

¹¹ McLaren, Women of the War, pp.10-11.

¹² Simmonds, Britain and World War One, pp.136-137.

¹³ Health of the Munitions Worker, pp.115-116.

¹⁴ Cathy Hunt, 'Sex Versus Class in Two British Trade Unions in the Early Twentieth Century', in *Journal of Women's History*, Vol.24, No.1. (2012), pp.99-100.

¹⁵ Lady Kennard, 'England's Feminine War Worker', *North American Review*, Vol.207, No.751 (1918), pp.837-838.

¹⁶ Woollacott, On Her Their Lives Depend, p.2.

for working class girls whose family needed their additional income.¹⁷ Woollacott suggests that propagandists targeted middle and upper class women into higher positions because 'working class women were said to prefer a "better class" forewoman because..."they prefer not to follow their own class^{"1.18} Targeted recruitment was inferred by the Ministry of Munitions, and although they may have been trying to preserve harmony within classes by recruiting higher class forewomen and supervisors this move created tensions between the classes, as working class women could not reach the same status as other women. Although the Ministry of Munitions did not explicitly state that these positions were not for working class women, it intimated it through recommendations it made for a welfare supervisor's qualification. A welfare supervisor had to 'command the respect of workers...be of good standing and education...[and have] Experience of clubs or other forms of social work'.¹⁹ Middle and upper class women were more likely to be considered as having a 'good standing' simply because of their class and were more likely than working class women to be better educated, making the role difficult for working class women to access.²⁰ Even though some munitions workers such as Naomi Loughnan insisted that 'inside the gates [of the munitions factory] we are all on a level', in reality class differences persisted, middle-class women were working in the factories but they were normally supervising the working class women and the ones able to have a slight career progression.²¹

Within the factory industrial canteens also emerged with the increased number of female munitions workers. Frank Bradbury ate in the basement before the war, until more women arrived in the factory and a canteen was built.²² In 1916 the Police Factories Act gave the government power to force factory owners to make proper food provisions within factories to prepare, heat and eat

¹⁷ Elsa Thomas, *Imperial War Museum*, Reel 3.

¹⁸ Woollacott, On Her Their Lives Depend, p.40.

¹⁹ Health of the Munitions Worker, pp.114-115.

²⁰ Ibid.

²¹ Naomi Loughnan, in Joyce Marlow (ed.), *The Virago Book of Women and the Great War* (London: Virago Press, 1998), p.167.

²² Frank Bradbury, Imperial War Museum, Reel 5.

meals.²³ The Ministry of Munitions recommended this was best done by an industrial canteen.²⁴ In 1916 when French women visited a munitions factory in Scotland they were so impressed with the canteen system they were 'going to tell the French Minister of Munitions...for in France they [had] not advanced beyond the refectory system'.²⁵ Although successful, gender and class issues could linger in the canteens. Elsa Thomas claimed that not even in the canteen did she mix with the engineering workers who 'were a different class of person', and another worker reported that the general workers ate in one canteen and the 'miaows', the term given to the lady workers, ate in another. ²⁶ Clearly, a person's position and class within the factory affected their eating arrangements. Gender divisions were also evident in canteens. At Greenwood and Batley munitions factory in Leeds men and women took meals at different times in the canteens as Frank Bradbury claimed 'men [were] loose if women's about', factory owners there were concerned with the promiscuity that could ensue with the mixing of men and women.²⁷ Woollacott's explanation of canteens being 'organized hierarchically and...segregated' correctly correlates with the experience of most workers, the introduction of canteens was a pioneering move for Britain and coveted by countries such as France, as well as helping munitions workers get a nutritious meal to maintain their health, but the success of canteens were tainted with prejudices and divisions.

Health of workers

'Without health there is no energy, without energy there is no output'. ²⁸ The Ministry of Munitions commissioned a handbook advising on the health of munitions workers as their role was so important to society during wartime. The health of a worker was thought to be maintained by two principles, 'favourable conditions for the body itself' being nutrition, exercise, rest and fresh air, and

²³ *The Health of the Munitions Worker*, p.70.

²⁴ Ibid.

²⁵ 'Munition Makers Tour', *The Times*, 22nd November 1916.

²⁶ Elsa Thomas, *Imperial War Museum*, Reel 6; A Lady Worker, 'Behind the Firing Line: Some Experiences in a Munition Factory', *Blackwoods Magazine* (1916), p.199.

²⁷ Frank Bradbury, Imperial War Museum, Reel 4.

²⁸ Health of the Munitions Worker, p.13.

'A satisfactory environment' which included a clean factory, reasonable working hours and preventing injury or illness.²⁹

Elsa Thomas suggests that the prospect of working in munitions was so frightening, women left before attending training at Woolwich Arsenal.³⁰ The health and safety of workers had to be prioritised for women to remain efficient and attract them to dangerous work. Accidents could be devastating, and protective measures were taken to prevent them, Elsa Thomas stated that women were explicitly told to remove metal items or anything that could be driven into the body during an explosion, meaning all hairpins, corsets and rings were prohibited and removed in the shifting room.³¹ Workers in munitions were reported in contemporary magazines, including *The Shell* Magazine, to have had weekly medical inspections by doctors.³² Seebohm Rowntree also encouraged better working environments claiming that a wise employer would ensure 'the ventilation of his workrooms is good...the air is fresh and that they are well lighted'.³³ Noted philanthropists and the government encouraged better working environments for munitions workers to ensure they remained healthy and efficient workers. Even medical professionals such as Dr Rhoda Adamson, a key figure in allowing pregnant women to remain at work, claimed that women who worked in industry had 'brightened up...[and] improved in health' compared to before their industrial work.³⁴ Other medical figures such as Dr Mary Scharlieb, an 'eminent woman specialist', claimed that '[the work] the munitions worker [was] doing...[was] far less injurious to the health than the undue excitement of bridge-playing and dancing'.³⁵ Medical opinions and protective clothing were meant to provide reassurance for females that munitions factories were a safe

²⁹ Ibid.

³⁰ Elsa Thomas, Imperial War Museum, Reel 1.

³¹ Ibid, Reel 3 and 4.

³² I Ramsbottom, 'Women in Industry- Some Pioneer Work', *The Shell Magazine*, No. 1 (1917), Trench Journals and Unit Magazines of the First World War, p.22.

³³ Seebohm Rowntree, 'Welfare Work for Women in Munitions Factories', *Progress*, Vol.11, No.4 (1916), copy held in Gateshead Library, Tom Marshall Collection, TMC38/02, p.134.

³⁴ Angela Woollacott, *On Her their Lives Depend*, p.59.

³⁵ 'Women and Munitions: The Health Question' *The Times*, 5th May 1916.

working environment, as well as putting aside some gender prejudices of women's capabilities for armaments output, but the success of health provisions could be varied.

Explosions were a workplace hazard for all munitions workers. Munitions work was classified as 'danger work' and explosions were not uncommon.³⁶ Elsa Thomas recalled the 1916 Barnbow explosion where around fifty girls were killed.³⁷ George Ginns, a munitions worker at White and Poppe factory in Coventry from 1906 to 1918, claimed that accidents occurred 'nearly every week', mostly when 'girls were closing down [detonators they]...often...exploded...several [girls] lost hands'.³⁸ George Ginns highlights the dangerous working environment for munitions women, discussing explosions casually as it was a common occurrence within the industry. Caroline Rennels, a factory worker who moved to Slade Green munitions factory in Kent from 1916 to 1917 and at Woolwich Arsenal from 1917 to 1918, claimed that there were 'crowds' of accidents at Woolwich, but 'it was all hushed up...cos they'd be afraid people would leave' as explosions highlighted the dangers of munitions work and were damaging to the recruitment drive and the ammunitions output.³⁹ Not all explosions were fatal, showing the success of some welfare provisions, such as an explosion in North London in October 1918 where The Observer reported that 'no work people were injured'.⁴⁰ But many explosions were fatal, such as an explosion in Scotland on 26th April 1917 when a shell exploded killing twelve workers, eleven of which were females, and The Manchester Guardian was quick to inform that 'the output of munitions [had] not been affected'.⁴¹ Media reports about explosions were short, not referencing the after-effects or horrific details, as this type of publicity would be damaging to the recruitment drive, also the emphasis on output in explosion reports suggests output was prioritised over the value of women's lives. However, the first-hand accounts offer a more insightful view into the dangers of munitions work, Elsa Thomas recalled that in the

³⁶ McLaren, *Women of the War*, pp.30-1.

³⁷ Elsa Thomas, *Imperial War Museum*, Reel 6.

³⁸ George Ginns, Recorded 1976, *Imperial War Museum*, Catalogue Number 775, Reel 4.

³⁹ Caroline Rennels, Recorded 19/02/1975, *Imperial War Museum*, Catalogue Number 566, Reel 2.

⁴⁰ 'North London Explosion', *The Observer*, 13th October 1918.

⁴¹ 'Explosions at Munitions Factories', *The Manchester Guardian*, 28th April 1917.

1916 Barnbow explosion a girl was decapitated, showing the danger munitions women worked in daily.⁴² The discrepancy in the recording of explosions by the media compared to the first-hand experience of munitions workers was due to the media's ulterior motive of maintaining public morale and ensuring the munitions recruitment drive continued. The number of explosions and the horrific details, display why there was a need for welfare provisions within the factory.

Fillers had to content with the danger of explosions, like the rest of the factory, but also had the added danger of poisoning by working in close contact with trinitrotoluene (TNT). Fillers heated powdered TNT with nitrate and poured the mixture into shells.⁴³ Initially the deadly effects of TNT poisoning were not known or acknowledged, the Medical Inspector of Factories stated 'High explosives may cause skin irritation; [but] no danger to life'.⁴⁴ It was later revealed that people were dying from poisoning, with inquests as early as October 1916 following the death of munitions worker Lydia Gibson in which it was found she was not given proper equipment for the hazardous working environment.⁴⁵

Externally TNT's effects were also evident. Kathleen Gilbert who worked in London in 1915 as a filler, claimed that 'everyone [at the filling station] turned yellow as a guinea'.⁴⁶ Filling girls were more commonly referred to as 'canary girls' due to the yellow hue of their skin from TNT absorption.⁴⁷ Elsie McIntyre, worked in a blouse factory but moved into munitions manufacturing in Leeds from 1916, working on the filling station she had direct contact with TNT.⁴⁸ She recalled being given 'two half-pints of milk a day to keep out the poison from the [TNT] powder', but despite preventative measures the effects of poisoning were evident.⁴⁹ She claims fillers were given gloves

⁴² Elsa Thomas, *Imperial War Museum*, Reel 6.

⁴³ Pankhurst, *The Home Front*, p.341.

⁴⁴ Ibid.

⁴⁵ Ibid, pp.342-3.

⁴⁶ Kathleen Gilbert, Recorded 30/09/1985, *Imperial War Museum*, Catalogue number 9105, Reel 1.

⁴⁷ Paula Bartley, *Votes for Women: 1860-1928* (London: Hodder and Stoughton, 1998), p.95.

⁴⁸ Elsie McIntyre, Recorded 02/07/1975, *Imperial War Museum*, Catalogue Number 673, Reel 1.

⁴⁹ Ibid.

to stop skin contact with TNT, but the yellow staining 'even went through the gloves'.⁵⁰ Women could be forced to work with TNT and refusing could lead to an employment tribunal, if the worker lost they could be dismissed without a certificate, making future employment difficult.⁵¹ The 1915 Munitions Act created munitions tribunals to settle disputes between employers and employees.⁵² In 1917 seven girls were brought to a munitions tribunal for refusing to work with TNT because gloves and masks were not provided, the tribunal claimed such provisions were unnecessary and fined the girls 7s each.⁵³ Although some health provisions were in place, some women still feared their health and safety was not taken seriously by their employer, the Ministry of Munitions handbook could only encourage, not enforce, better health and safety provisions from private factories.⁵⁴ When asked if there were any first aid provisions in Park Royal munitions factory Kathleen Gilbert abruptly answered 'nothing whatsoever'.⁵⁵ Alice Kedge, a munitions worker in London who came from a "respectable" working class district', claimed that apart from caps and pushing up their collars they had little else in terms of protective clothing.⁵⁶ There could be variation to health and safety provisions within factories, however, both Kathleen Gilbert and Alice Kedge discuss their time working in munitions in 1915, just as the Ministry of Munitions was being formed and therefore the recommendations to factories to sustain efficient workers by helping them remain healthy had not yet been fully implemented. The need for the creation of munitions tribunals suggests tensions between factories and munitions women, and the 1917 tribunal of the seven munitions workers shows that even after the Ministry of Munitions pressured for better welfare it did not necessarily equate to workers receiving better care.

⁵⁰ Ibid.

⁵¹ Woollacott, On Her Lives They Depend, pp.80-81.

⁵² A Woman Assessor, *Women in the Munitions Courts*, copy held in Gateshead Library, Tom Marshall Collection, in TMC46/02, p.215.

⁵³ 'Revolt of the Seven Shell Girls', *Daily Express*, 14th February 1917.

⁵⁴ Health of the Munitions Worker, pp.11-12.

⁵⁵ Kathleen Gilbert, *Imperial War Museum*, Reel 1.

⁵⁶ Alice Kedge, Memoirs 1915, in Joyce Marlow (ed.), *The Virago Book of Women and the Great War* (London: Virago, 1998), pp.85-6.

Working hours were a key issue regarding the health of munitions workers. Women were thought to be particularly prone to sickness and fatigue due to their 'physical capacity' and 'prolonged industrial employment' would exacerbate their fatigue.⁵⁷ Women often worked all week having a half day on a Saturday, however, working hours of munitions women were revised in some factories such as Whitworth Armstrong in Newcastle, giving workers all of Sunday off instead, however, this was due to financial reasons to reduce overhead costs as workers were paid doubletime on a Sunday.⁵⁸ Regardless of the revision and concerns over women's capacity to work, numerous accounts of female munitions workers describe the long shifts they worked, some over eleven hours.⁵⁹ One munitions worker at Hackney Wick discusses an occasion when both men and women were so tired that during their breaks they fell asleep in their food.⁶⁰ Despite the recommendations for healthy workers and appropriate hours by the Ministry of Munitions, some employers did not follow the advice immediately, but by 1918 the average working day for a female munitions worker was eight hours.⁶¹ Female trade unions organiser Helen Bowan Pease claimed that no real changes were made to munitions women's working hours until large accidents, for example the explosion at Silvertown munitions factory in 1917 which forced employers to take notice.⁶² Although women were deemed inferior and officially they were a cause for concern because of their perceived susceptibility to fatigue, in reality gendered prejudices were put aside when it was beneficial to employers to do so to increase output.

Provisions for home life

The munitions factories were often portrayed as a 'melting pot' of classes, but some accommodation distinguished between classes of women and therefore undermined the image of class equality

⁵⁷*Health of the Munitions Worker*, pp.78-79.

⁵⁸ Woman Worker Magazine (1916), Tom Marshall Collection, TMC 37/04.

⁵⁹ Kathleen Gilbert, *Imperial War Museum*, Reel 1.

⁶⁰Horner, 'A Glimpse of War Work', *Time Remembered*, Tom Marshall Collection, TMC 37/03, p.204 ⁶¹ Simmonds, *Britain in World War One*, pp.139-40.

⁶² Helen Bowan Pease, Recorded 1976, *Imperial War Museum*, Catalogue Number 821, Reel 14.

within factories.⁶³ Munitions worker, Isabella Ford, outlines within her letter to the *Daily News and Leader* the underlying tension between classes as early as 1915, claiming that middle-class women returned to a 'comfortable house... [and an] aired bed in a quiet room', whereas, working class women returned to 'an unaired bed, which the day-worker [had] only just left'.⁶⁴ Isabella Ford further describes the working class munitions workers' housing as continually noisy, sometimes rooms were shared amongst several people and could smell.⁶⁵ There is an undercurrent of resentment from Isabella Ford's writing, clearly for her the inequalities between housing for working and middle-class women were frustrating. Isabella Ford's frustrations were not an isolated case, Elsa Thomas recalled that during her training at Woolwich Arsenal the more wealthy women stayed at the exclusive Waldorf hotel.⁶⁶ Elsa Thomas clearly recognised the class divisions caused by staying at the Waldorf and refused to stay and 'throw [her] money away', but states it was 'the first class [that stayed there and they] could afford to pay'.⁶⁷ Although the accommodation Elsa Thomas discusses was not provided by the factory and it was the choice of the women to stay at the Waldorf, in the initial stages of the munitions drive there was clearly class divisions, and these divisions would filter through into the factory-provided accommodation.

A 1916 article in *Engineering* magazine celebrates the triumphs of the munitions welfare systems, however, within its description it reveals that for the 'highly educated class' of women employed 'a special hostel [was] provided...with a charge of 18s per week', whereas a working class single woman would be placed in different quarters for 14s per week.⁶⁸ Different social classes of females may have been portrayed by the state and the media to have been working side-by-side in the factory, but class divisions could be clearly seen, those who could afford and were deemed

⁶³ Janet S K Watson, *Fighting Different Wars: Experience, Memory and the First World War in Britain* (Cambridge, Cambridge University Press, 2006), pp.127-130.

 ⁶⁴ Isabella Ford, 'Middle Class Women in Factories', *Daily News and Leader*, 14th December 1915, in Joyce Marlow (ed.), *The Virago Book of Women and the Great War 1914-1918* (London: Virago, 1998), pp.168-9.
 ⁶⁵ Ibid.

⁶⁶ Elsa Thomas, *Imperial War Museum*, Reel 2.

⁶⁷ Ibid.

⁶⁸ 'The Welfare of Munitions Workers', *Engineering*, 8th September 1916, Copy held at Gateshead Library, Tom Marshall Collection, TMC 39/03, pp.217-218.

deserving got better accommodation because of their status, evoking class tensions from working class women who could not have the same standard of living. Everyone within munitions factories worked for the good of the country, but some wealthier women worked with the privilege of better living accommodation.

The living arrangements not only displayed class tensions between munitions workers but also the extension of paternalism within the living environment. Simmonds describes the welfare system created by the surge in female munitions workers as allowing a 'new style of interventionist state' as 'workplace management [was put into] the hands of the state', this intervention can be seen in the munitions factory accommodation.⁶⁹ Within the government handbook, *Health of the Munitions Worker*, the state and munitions factories were unmistakably taking responsibility for the welfare of workers, especially females, as it stated, 'the responsibility lies, not only for caring for workers inside the factory, but also providing outside the factory safeguards needful for their health and morals'.⁷⁰ Maybel Cotterell worked as a lady superintendent in Gretna munitions factory from around 1916 and recalls taking new female workers' to the hostel...which had been furnished for their use'.⁷¹ Women in other munitions factories, such as Messrs.Vickers, also had crockery, table linen, laundry facilities, and in some cases even food and drink provided in hostels.⁷² The workers inhabiting such accommodations would have little else to think about apart from their work. The government extended its paternalism creating almost self-sufficient communities to ensure workers were well provided for and healthy to keep munitions output high.

Gertrude Shaw became a lady superintendent at Coventry munitions factory after working as a welfare officer in Woolwich Arsenal canteen.⁷³ She had previously worked as a headmistress, mistress of the Women's Institute in Woolwich, as a nurse and a health visitor, suggesting she was

⁶⁹ Simmonds, Britain in World War One, pp.136-137.

⁷⁰ Health of the Munitions Worker, p.119.

⁷¹ McLaren, *Women of the War*, pp.10-12.

⁷² 'The Welfare of Munitions Workers' *Engineering*, pp.217-218.

⁷³ McLaren, Women of the War, pp.117-8.

another example of an elite woman achieving a higher status factory role.⁷⁴ She described the colonies of munitions housing as each being 'under the direction of a competent matron', with each hostel in Coventry holding 100 girls and women, with around 6000 females in total.⁷⁵ Working in munitions factories exacerbated existing gender stereotypes and fears, such as women being irresponsible and being less physically capable to undertake strenuous munitions work. L.K.Yates writes at the end of the war and reflects that without the war women working in munitions in the strenuous roles which they had done would have been 'regarded as wholly unsuitable to the female capacity'.⁷⁶ Even medical professionals insisted that women were 'anatomically and psychologically...unfit for monotonous strain for any length of time', and this especially applied within the munitions factories.⁷⁷ The extension of paternalism into the home for munitions workers highlights the gender issues of the period. Essentially women were still not trusted as responsible and capable individuals and therefore welfare provisions, such as having a 'competent matron' overseeing their home life and reporting back to welfare supervisors, demonstrates that the factories and the state were taking responsibility for females.⁷⁸ Many munitions women were working in factories without male figure in their home life and the state brought in this welfare, extending paternalism to the home arguably to ensure women remained efficient workers in the absence of a strong male figure in their lives.

Leisure activities

Like housing, leisure activities were one section of women's lives where factory welfare would not have usually reached, however, with paternalism of factories entering into workers' homes it also extended into their leisure time. The official advice from the Ministry of Munitions was for factories to work alongside welfare supervisors to organise staff recreation activities, this was portrayed to be a measure to ensure staff had some leisure time, but it also gave the factory control over the

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ Yates, *The Woman's Part*, p.12.

⁷⁷ 'Women and Munitions: The Health Question', *The Times*.

⁷⁸ McLaren, Women of the War, p.118.

activities women participated in outside of work.⁷⁹ Woollacott claims women had the freedom to do what they wanted within their leisure time, which officially they did, however, factory organised recreation activities or clubs associated with the government were strongly encouraged and the easiest ones to access.⁸⁰

Gertrude Shaw organised many activities for the girls she supervised such as singing and dancing.⁸¹ The YMCA and YWCA worked with welfare supervisors, meaning the factory still had input in activities that appeared external.⁸² New clubs were opening frequently for female workers, in 1915 a club ran by the YWCA opened in Gateshead and specifically targeted munitions girls to join.⁸³ Although recreation opportunities were available, welfare officers 'kept [a] careful watch of the leisure hours of those under [their] charge', this constant supervision exhibits the extension of paternalism into women's lives and reinforced the interventionist policies that were being adopted to ensure women remained responsible and efficient workers.⁸⁴

The type of activities offered to workers also demonstrates the fear over the blurring of gender roles because of women participating in 'masculine' work, there was a society-wide fear that 'war work defeminized women'.⁸⁵ Mr G.F.Wilby wrote to his fiancée Ethel Baxter, voicing his concerns over her involvement in munitions work and turning 'into one of those things', which he saw as any woman participating in 'men's work' and becoming masculine.⁸⁶ Leisure activities targeted at women attempted to combat the public fear of women losing their femininity. In Gretna, Maybel Cotterell organised 'reading, writing [and] playing games'.⁸⁷ The situation was similar for munitions workers in the North East of England, where in a club for munitions girls the activities

⁷⁹ Health of the Munitions Worker, pp.113-114.

⁸⁰ Woollacott, On Her Their Lives Depend, p.3.

⁸¹ McLaren, *Women of the War*, p.119.

⁸² Horner, 'A Glimpse of War Work', p.205.

⁸³ 'New Club for Girls in Gateshead', 17th October 1915, Newspaper cuttings, A.G. Vol.1, bound copies in Gateshead Library, 908.9 SB007993, p.119.

⁸⁴ McLaren, Women of the War, p.12.

⁸⁵ Vicky Long, 'Industrial Homes, Domestic Factories: The Convergence of Public and Private Space in Interwar Britain', *Journal of British Studies*, Vol.50, No.2 (2011), pp.436-437.

⁸⁶ Watson, Fighting Different Wars, p.138.

⁸⁷ McLaren, Women of the War, p.12.

included music, games, reading and sewing, all of which were provided for free, further encouraging women to participate.⁸⁸ Many actitives available to women were traditional feminine pastimes, to reinforce to women, although they were temporarily filling men's jobs, their role in society remained a traditional female one in the domestic sphere.

However, there were some alternative activities for munitions women. Football was a common alternative leisure activity, with teams present in Edinburgh, Belfast, Cardiff and most famously Dick Kerr ladies' team.⁸⁹ Woollacott insists that football became popular with munitions workers because they were 'demonstrating class allegiance...[and] challeng[ing] gender constrictions' as football had been a male-dominated activity.⁹⁰ However, class and gender divisions were still evident within football teams which were typically deemed as the pinnacle of liberation for munitions women. Ali Melling emphasises that welfare supervisors still had influence over women's teams and they were usually managed by male colleagues.⁹¹ Men's involvement in women's leisure activities shows a slight amount of cross-gender bonding, however, men remained in managerial positions over women, reinforcing the gender hierarchies of society and an extension of the factory paternalism into women's leisure time. Furthermore, football was almost exclusively targeted at the working class munitions women, with one YWCA volunteer from the North East claiming that the 'rough' working class women 'did not want to learn dances, nor sing songs' so welfare supervisors encouraged them into football.⁹² As such, female munitions workers experienced division through class, as well as gender, with working class women perceived as unsuitable to mix with middle-class women and participate in the same activities, instead they were segregated into traditional working class pastimes. Also welfare supervisors' input meant that the factory also had an influence, therefore paternalism was extended into football teams which at first appeared outside the control

⁸⁸ 'New Club for Girls in Gateshead', p.119.

⁸⁹ Jean Williams, 'The Fastest Growing Sport? Women's Football in England?', *Soccer and Society*, Vol.4, No.2 (2003), pp.114-5.

⁹⁰ Woollacott, On Her Their Lives Depend, p.138.

 ⁹¹ Ali Melling, 'Wartime Opportunities: Ladies Football in the First World War Factories', in J.A.Mangan (ed.), *Militarism, Sport, Europe: War without Weapons* (London: Frank Cass, 2003), pp.123-124.
 ⁹² Ibid, pp.127-8.

of the factories, and the male management of the teams reinforced the traditional gender roles of society, of men being the leaders and women being subordinate.

Chapter 3

Perceptions of female munitions workers: patriotic heroines to 'ruthless self-seekers depriving men'¹

The presentation and perception of female munitions workers was not a static image, it developed over time according to class, gender and audience. The government tried to present a positive image of munitions workers to encourage women into the role, but accounts suggest that this was a propaganda tool, not a realistic depiction. Woollacott claims that no 'cross-class gender bonding' was created through the munitions factories, this contrasts the image the government wanted to present, however, it does seem to be an accurate explanation of female munitions workers experiences.² The image of munitions workers had to overcome opposition and concerns over female employment, such as those from male munitions workers and concerns over defeminisation. A balancing act had to be manoeuvred by the media and government who attempted to adapt the image of female workers to facilitate a surge into munitions, but not induce too radical a change in attitudes that once war was over the gender and social structure would be in disarray, this can be seen through the constant references to female values and depictions of women being irresponsible without a male figure present. As well as gender, class also affected how female munitions workers were perceived, with working class women being demonised by male workers and later the press, creating an even more difficult working environment for women to manoeuvre. The most obvious change in perception of female munitions workers came towards the end of the war, women once praised as patriotic heroines experienced a backlash as they were forced out of work and vilified by the government, press and public if they tried to remain in 'male' jobs.

Propaganda and projected perceptions of female munitions workers

One of the most publicised images of female munitions workers was of a cohesive community within the factories, which encouraged equality and dismissed segregating factors such as class and gender.

¹ Irene Clapham, *Towards Sex Freedom* (London: John Lane, 1935), p.201.

² Woollacott, On Her Their Lives Depend, p.2.

Images published by the media, such as recruitment posters emphasised the apparent idyllic atmosphere. One poster states 'These women are doing their bit' and depicts a well-dressed woman entering a busy munitions factory with a soldier cheerfully encouraging her, suggesting munitions work was a harmonious, supportive environment by all involved.³ Janet Watson also upholds the stereotypical view of munitions factories describing it as a 'melting pot' of classes.⁴ However, firsthand accounts differ from the community spirit that the media and government portrayed. Joan Williams, did not want to trouble her colleagues to help her move around after an eye accident, this fear of being a burden does not evoke an image of factories being a supportive community.⁵ Furthermore, Elsa Thomas was of higher status being a supervisor, but even she claims that women would 'fight like anything between them [especially] working girls'.⁶ Stories of fighting is something that Woollacott also notes, suggesting that tensions within a single class 'At times...erupted into fighting', such as Woolwich Arsenal worker Lilian Bineham who hit a "rough girl" from Silvertown' who accused her of gossiping in the factory.⁷ The descriptions of factory life by Joan Williams and Elsa Thomas undermine the traditional view of an equal and supportive community that the media and government presented, with Elsa Thomas also emphasising class issues by implying working class girls had a reputation for fighting, and even within their own classes the atmosphere was not always harmonious. The government had to portray a community atmosphere otherwise women would be reluctant to enter the dangerous job of munitions manufacturing.

Another term repeatedly associated with female munitions workers was 'patriotic'. Watson highlights the militaristic language used to describe female munitions workers, who were often referred to as 'Tommy's sister', this created a legitimacy to women's work in traditionally male environments.⁸ Militaristic language highlighted the importance of women's work as their patriotic

³ 'These Women Are Doing Their Bit', 1916, *Imperial War Museum*, Catalogue number Art.IWMPST3283. (Appendix 1)

⁴ Watson, *Fighting Different Wars*, p.127.

⁵ Joan Williams, A Munition Worker's Career, p.26.

⁶ Elsa Thomas, *Imperial War Museum*, Reel 4.

⁷ Woollacott, On Her Their Lives Depend, pp.42-3.

⁸ Watson, *Fighting Different Wars*, p. 131

duty to the country, the female equivalent of fighting on the frontline. The emergency situation of war meant it was necessary to change the perception of female competencies, one way of doing this was emphasising their patriotism. Seebohm Rowntree opposed women working nightshifts and long hours in munitions factories, but agreed that they were a necessary patriotic sacrifice for the war effort.⁹ Even Lloyd George recognised that prejudices to female employment needed to be temporarily overcome for the benefit of the country, as he stated in July 1915, that 'all that work [making shells] can be done by women...but what we have got to do is get rid of prejudice. That is really a serious obstacle'.¹⁰ But Lloyd George continued, advocating only temporary liberation, stating that the 'apprehension of the working man, who is afraid that once war is over...[women] will do [the work] so well that there will be no further use for the services of men' was an unnecessary fear as women were carrying out 'war work, and when war is over there will be no need for it...it is not a competition...[it] is for the purpose of helping their country'.¹¹ Therefore patriotism was used even by politicians to temporarily justify women's entrance into 'male' work. Patriotism allowed women's work in munitions to be perceived as a necessary war measure rather than a liberating change. Women's work in industry was continually linked to the war effort and patriotism, both legitimising their entrance into male industries, underlining that women's work was only for the duration of the war and in the long-term attitudes to work and gender had not changed. Women were allowed entrance into male roles because of what was seen as an emergency situation, not because society believed they belonged there.

Perceptions of female workers whilst in work

One reason the patriotism of female munitions workers was emphasised was to combat hostility to their work. Although the media and government were initially eager to highlight the community feel and patriotism of female workers there was opposition to their work, most notably from male munitions workers. Henry Oxley previously worked as a silk warehouse clerk, but from 1916 to 1917

⁹ Rowntree, 'Welfare Work for Women in Munitions Factories', p.133.

¹⁰ 'Women and War Work', *The Manchester Guardian*.

¹¹ Ibid.

he worked at Woolwich Arsenal drilling holes into fuses.¹² He recalled that 'it was felt [women] weren't capable of doing the work [in his shop]', therefore showing hostility towards female workers in certain roles.¹³ Frank Bradbury also highlighted male hostilities towards women by commending 'good girls' for coming into the factories, but condemning cartridge girls, describing them as 'hooligans' and 'scum', showing there was also a hierarchy of roles for women, some roles gained more resentment from colleagues than others.¹⁴ Elsa Thomas also highlights the hostilities claiming that men refused to train women, only eventually agreeing because women had the support of the army and government.¹⁵ Male supervisors went as far as implying that women were 'pampered' if they 'request[ed] a few hours off'.¹⁶ Therefore, the idyllic community atmosphere that the media and government presented was not representative of munitions work for females. Women had to overcome hostility from men because of their gender and class.

However, there were anomalies to the trend. Joan Williams recalls having an excellent relationship with her foreman Mr Barker, describing him as 'exceptionally nice' and considered him a friend.¹⁷ Mr Barker taught women skilled work with 'no jealousy' and helped girls if they fell behind.¹⁸ But even the 'exceptionally nice' Mr Barker still had class prejudices, 'never really engag[ing] any really rowdy or low class [women]', as he associated them with rowdiness and therefore as less efficient workers. ¹⁹ The government and media allowed munitions factories to be perceived as communities of equality filled with patriotic workers, however, accounts from munitions workers suggest that they were still judged according to their sex and class, even by liberal-minded male colleagues, creating a complex hierarchy within the munitions factories in which women were placed.

¹² Henry Oxley, Recorded 1975, *Imperial War Museum*, Catalogue Number 716, Reel 1.

¹³ Ibid.

¹⁴ Frank Bradbury, *Imperial War Museum*, Reel 4 and Reel 7.

¹⁵ Elsa Thomas, *Imperial War Museum*, Reel 3.

¹⁶ Ramsbottom, 'Women in Industry', p.22.

¹⁷ Joan Williams, A Munition Worker's Career, p.10a.

¹⁸ Ibid, pp.10-11.

¹⁹ Ibid.

Although the government and media worked to present positive images of female munitions workers, a central concern for the public was the defeminisation they feared would occur by women undertaking heavy and dangerous male jobs. The contradiction of women who were naturally given the role of creating and nurturing life, carrying out tasks in munitions factories with the purpose of destroying life created confusion from the public. The *Women's Volunteer Reserve Magazine* highlighted the confusion in 1917, emphasising the development of women's roles from being relied upon to 'help men restore life...[to] the Government [demanding they]...help men to destroy it'.²⁰ The fear that munitions women had become masculine was exemplified by a personal letter Mr.Wilby wrote to his fiancée, pleading with her 'not to undertake any war work that was like men's work...[especially] not munitions...remain a woman don't develop into one of the things'.²¹ Mr.Wilby was concerned about the impact of 'men's' work on women and also dehumanised munitions women referring to them as 'things', showing that gender prejudices remained during the war and it was not the liberal atmosphere for women that the media, propaganda and subsequent historical accounts present.²²

The government did attempt to combat accusations of defeminisation. Watson claims that the thought of women's growing masculinity in munitions factories was a driving factor behind the introduction of middle-class women as lady supervisors to observe women and ensure they maintained their 'female morals'.²³ However it can also be argued that the morality of women was being supervised by these women through their close contact with men in the munitions factories which was also deemed a threat the ideal perception of women's behaviour Leisure activities such as sewing which was encouraged in a munitions workers club in the North East of England, sought to ensure women maintained traditional skills and did not lose sight of their traditional role and

²⁰ Kate Rathbone, 'The Mobilization of Women', *Women's Volunteer Reserve Magazine* (Oct 1917), Trench Journals and Unit Magazines of the First World War, p.193.

²¹ Watson, *Fighting Different Wars*, p.138.

²² Ibid.

²³ Ibid, pp.139-140.

duties.²⁴ The media also pressured women to uphold conventional female values with emphasis on beauty, reinforcing that they had to conform to traditional roles of being objects of beauty. The *Daily Mirror* published an article in November 1918 about a beauty contest for women workers, in which munitions women were specifically described as having 'splendid looks'.²⁵ The publication date of the article is important, as towards the end of the war it was even more important for the government and media to try and reinstate traditional female roles to usher women out of the 'male' workforce to make way for soldiers.²⁶ The obsession with femininity emphasised to women that it was their duty to look good, therefore stereotypical gendered perceptions of what women should act and look like persisted even when they were doing very different work.

There was also a society-wide fear that female workers were irresponsible and reckless; this image was used to attack female munitions workers. Munitions women were accused of spending outrageously high wages on items deemed inappropriate and irresponsible for women, such as alcohol and expensive clothing.²⁷ However, wages of munitions workers were exaggerated by the press creating jealousy and a negative perception of these women. Lady Kennard intimated that women were getting high wages and were 'incline[d] towards vulgar ostentation' but attempted to defend these women because their work was important and claimed they had honourable values of 'justice and generosity'.²⁸ Frank Bradbury claimed in his factory women were 'living like lords' with the wages they earned, clearly he believed the perception that female wages were too high and used irresponsibly.²⁹ George Ginns also commented on women's wages, stating that women would 'come from all over the place because they were getting jolly good money'.³⁰ It is interesting that both male munitions workers shared the perception of women receiving high wages, when they

²⁶ Ibid.

²⁴ 'New Club for Girls in Gateshead', p.119.

²⁵ '500 Champions of Womanly Beauty', *The Daily Mirror*, 6th November 1918.

²⁷ Watson, *Fighting Different Wars*, p.127.

²⁸ Lady Kennard, 'England's Feminine War Worker', pp.837-8.

²⁹ Frank Bradbury, *Imperial War Museum*, Reel 5.

³⁰ George Ginns, *Imperial War Museum*, Reel 4.

would have been paid a similar rate, if not more. This indicates that gender prejudices remained as women specifically were accused of being paid too much.

Furthermore Madeline Bedford's 1917 satirical poem, Munitions Wages, depicts the common attitude of shock at women being paid high wages, 'Earning high wages...five quid a week, a woman too...I spends the whole racket on good times and clothes...If Fate tumbles on us, And blows up our shed...Afraid! Are you kidding, With money to spend!'.³¹ Bedford mocks the perception of female munitions workers as ostentatious spenders, a perception perpetuated by accounts such as Frank Bradbury's, intimating that the reality of the situation was not being presented and did not consider the long hours and imminent danger the women worked in. Caroline Rennels recalled receiving 30s per week when shell-filling at Slade Green factory in Kent, she claimed her pay declined to less that £1, but after campaigning it increased to 'about £2.10 [per week]...which was a lot of money', but felt it reflected her twelve hour shifts.³² Kathleen Gilbert claimed that she was lucky if she earned '£3 per week...and that was piecework'.³³ Seebohm Rowntree recommended that welfare supervisors be paid between £3 and £5 in large factories, with shop floor girls earning an average of £1 per week, and an assessor of female munitions courts claimed it was only in 'exceptional cases... where women [were] earning up to 3l' per week.³⁴ Simmonds states that female munitions workers in Leeds could earn up to £12 per week including their bonuses, this figure seems exaggerated compared to other findings from first-hand accounts, and an example of the extortionate wages munitions workers were reported to receive, but in reality received nowhere near that amount.35

Sue Burley discusses the alliance between the Amalgamated Society of Engineers (ASE), and the National Federation of Women Workers in the summer of 1915, which agreed that women who

³¹ Madeline Bedford, 'Munitions Wages', in Catherine Reilly (ed.), *Scars upon My Heart: Women's Poetry and Verse of the First World War* (London: Virago Press, 1981), pp.7-8.

³² Caroline Rennels, *Imperial War Museum*, Reel 1 and Reel 2

³³ Kathleen Gilbert, *Imperial War Museum*, Reel 1.

³⁴ Rowntree, 'Welfare Work for Women in Munitions Factories', pp.137-8; A Woman Assessor, *Women in The Munitions Courts*, p.214.

³⁵ Simmonds, *Britain and World War One*, p.135.

replaced men in engineering would receive the same rate on piecework and those on time-rates would receive a special 'woman's rate'.³⁶ The wages of female engineers were the minority of 'exceptional' cases which the female assessor makes reference to, most women in munitions were doing unskilled or semi-skilled roles because of the premise of dilution schemes, meaning the higher wages were inaccessible for the majority of female munitions workers.³⁷ Clearly there were variations in wages depending on specific factories and roles. Workers agreed at some points they were receiving good wages but they reflected the hours of work they endured. Watson insists that women were attacked for their apparent high wages by the public, this perception helped to create an image of women being irresponsible without a male presence.³⁸

Although the media repeatedly attacked women's spending and alcohol consumption there were rebuffs against the accusations.³⁹A 1918 *Daily Mirror* article strongly protested against the popularised image of reckless munitions women, claiming that accusations of 'excessive smoking and drinking...[were] absurd'.⁴⁰ The defence of munitions girls was reflected by first-hand accounts such as Elsa Thomas', who claimed that she saw only one girl come into work intoxicated.⁴¹ Susan Grayzel highlights another female group demonised for spending, soldiers' wives who were accused of spending separation allowances on alcohol.⁴² Both groups were left during the war without a male figure.⁴³ An area not fully explained in current historiography is why the image of munitions workers and soldiers' wives being financially irresponsible persisted. The irresponsible image reinforced that women needed men to keep the structure of society and prevent chaos, allowing stereotypical views of women to perpetuate, seeing them as easily led and irresponsible without male guidance.

³⁶ Sue Burley, Women in Britain Since 1900 (Basingstoke: Palgrave, 1999), p.40.

³⁷ A Woman Assessor, Women in the Munitions Courts, p.214; Culleton, Working-Class Culture, p.3.

³⁸ Watson, *Fighting Different Wars*, p.127.

³⁹ Ibid, p.127.

⁴⁰ 'Angry Munitions Girls', *The Daily Mirror*, 6th November 1918.

⁴¹ Elsa Thomas, Imperial War Museum, Reel 4.

 ⁴² Susan Grayzel, 'Liberating Women? Examining Gender, Masculinity and Sexuality in First World War Britain and France', in Gail Braybon (ed.), *Evidence, History and the Great War: Historians and the impact of 1914-1918* (Oxford: Berghahm Books, 2008), pp.116-118.
 ⁴³ Ibid.

Perceptions of the hierarchy within factories by females

A complicated hierarchy was active within the munitions factory walls. Elsa Thomas was a forewoman and when asked how the factory girls felt about her she stated, 'they loved me', receiving a silver dish for her birthday from them, suggesting that the forewomen were liked by their staff.⁴⁴ Some positions within the factory could be viewed positively by other female's, however, it is worth noting that these accounts come from the women themselves, therefore they are unlikely to portray themselves as bad supervisors or disliked by their employees. McLaren's account referred to the most famous lady supervisor, Lillian Barker, as 'superwoman' and other supervisors as being a 'guardian' for munitions women.⁴⁵ Lady supervisors being referred to as women's guardians reinforces the perception that females required guidance because they were unable to be responsible for themselves.

However, not all factory roles occupied by women were viewed so positively. Woollacott suggests the intrusive nature of welfare officers, who observed all aspects of female workers wellbeing, could easily be viewed negatively by the women being scrutinised in such a way.⁴⁶ Also the job of welfare supervisor was created to give middle-class women a suitable role, as well as maintain female values within the factory, but class-based employment caused tensions to arise between general workers and members of the hierarchy.⁴⁷ Elsa Thomas even admits that the girls were 'ignorant' and would remove their masks 'as soon as [she]...walked away', suggesting that her supervisees were not as respectful as she first portrayed since they repeatedly ignored her instructions.⁴⁸ Munitions women were not perceived the same way even by the women themselves, but interpretations varied on an individual basis. Workers perception of the female hierarchy in factories was influenced by resentment over class or positivity about their helpfulness.

⁴⁴ Elsa Thomas, *Imperial War Museum*, Reel 4.

⁴⁵ McLaren, *Women of the War*, pp.9-11.

⁴⁶ Woollacott, On Her Their Lives Depend, pp.72-5.

⁴⁷ Ibid.

⁴⁸ Elsa Thomas, *Imperial War Museum*, Reel 5.

As well as the obvious hierarchy between supervisors and workers, other tensions and hierarchies were present, making the position of women within munitions factories even more complex. Despite Braybon insisting that working class women of the First World War were a 'coherent group', many more hierarchies and tensions were present between working class munitions women according to role or position, meaning they were a fragmented group even within their own class.⁴⁹ Elizabeth Gore claimed that the munitions girls were 'extremely loyal to [their] own shop and if one girl made a derogatory remark about another girl's shop, a fight might ensue'.⁵⁰ In Woolwich Arsenal she also noted that girls adapted their clothes to show support for their own shop, "cap-shop" girls strutted around proudly with emerald green ribbon on their shoes [and]...the "new fuse" girls followed with yellow'.⁵¹ Furthermore, some roles and shops were seen as lower status, most notably fillers and cartridge girls, who Frank Bradbury labelled as 'scum'.⁵² Elsa Thomas also held prejudices against fillers, who often turned yellow due to TNT poisoning, claiming that the fillers 'would come and poach our girls' stuff...[and] steal their uniform', she had a negative view of the type of girls fillers were, claiming that most people 'wouldn't take a job somewhere if [they]...would turn yellow'.⁵³ Elsa Thomas casts aspersions over the filling girls labelling them as thieves and intimating they were of lower status, also stating that the girls would steal from 'our girls' implies that there was definite segregation within the munitions workforce.⁵⁴ Caroline Rennels breaks down the hierarchy even further, claiming that she did not mix with girls from other benches within her own shop and only remained with the 'clique on [her] bench'.⁵⁵ Clearly shop floor women in the factories did not form a cohesive sisterhood, but were placed into an even more fragmented hierarchy of status according to their shop. Munitions factories were not the harmonious communities that the propaganda presented. Women had to negotiate a complex set of hierarchies,

⁴⁹ Braybon, *Women Workers*, p.13.

⁵⁰ Gore, *The Better Fight*, pp.67-8.

⁵¹ Ibid.

⁵² Frank Bradbury, *Imperial War Museum*, Reel 4 and Reel 7.

⁵³ Elsa Thomas, *Imperial War Museum*, Reel 5.

⁵⁴ Ibid.

⁵⁵ Caroline Rennels, *Imperial War Museum*, Reel 4.

finding their position in factories depended upon their gender, class, shop they belonged to, and specific role within the factory.

Post World War One perceptions

The common perception at the beginning of the war was of munitions women as patriots. However by the end of the war there had been a shift creating a backlash against women. The impact of women's work in industry, such as munitions, is an area of historiographical debate. Marwick insists that 'war gave emancipation to women'.⁵⁶ Yet, Deirdre Beddoe suggests that women workers were commended by the media during the war, but once war ended women were vilified for continuing to work in stereotypical male industries.⁵⁷ The future hopes for female munitions workers exceeded what was delivered post-war. In 1917 McLaren predicted that 'The outcome of munitions work [would] mean much more in the future development of [women's] industrial life. Women like Miss [Lillian] Barker...in attempting a great achievement, have accomplished an immeasurable one'.58 Women clearly expected progression to occur after the war, considering the amount of work they had done in munitions, putting themselves in danger, working tirelessly and labelled as patriotic heroes by their government. Therefore when women were 'cruelly forced out of work' and demonised towards the end of the war the wounds cut deep.⁵⁹ Women were quickly depicted as a 'threat to the family wage' as soon as it became apparent that servicemen would be returning and needed jobs to return to.⁶⁰ Elsa Thomas claimed that even when she was training in munitions in 1916, she 'had that feeling that [she was]...going to take a man's wage' and men felt the same, being

⁵⁶ Marwick, Britain in the Century of Total War, p.108.

⁵⁷ Deirdre Beddoe, *Back to Home and Duty: Women Between the Wars 1918-1939* (London: Pandora, 1989), pp.10-13.

⁵⁸ McLaren, Women of the War, p.18.

⁵⁹ Ibid.

⁶⁰ Bartley, Votes for Women, p.99.

hostile towards training the women 'because they didn't want to show [the women] their livelihood'.⁶¹

The concerns over taking men's wages were intensified towards the end of the war by the impending return of men.⁶² The backlash against female munitions workers is apparent in a letter written by Marian White to the *Woman Worker Magazine* in January 1917.⁶³ Marian White talks of the 'anxiety felt as to how things will arrange themselves after the war' and that women were feeling torn between being 'shouldered out of [their] jobs [which] some of [them] need[ed] badly' and the shame imposed on them by attempting to keep their job and 'keep[ing] a returned soldier out of his'.⁶⁴ Women were demonised by the media for attempting to maintain their jobs which could have been filled by men. There was pressure to remove women out of 'male work' and redeploy them back into traditional 'female' industries, such as domestic service. Lily Truphet had been a domestic servant before taking a job in Woolwich Arsenal for the duration of the war, she stated that after leaving munitions 'you more or less had to go into the service of cleaning', as that was the main alternative occupation offered to demobilised munitions workers.⁶⁵

Even official spheres reinforced the perception that women should be back in traditional industries. Lloyd George advocated women's involvement in war industries such as munitions, but stated 'once war is over there will be no need for it' with regards to women being employed in 'male' jobs like munitions, seeing women's role as a traditional one outside of war emergencies.⁶⁶ Culleton adequately explains the shift in attitude towards female munitions workers, as jobs that women did during the war were given to men and women were pressured to leave their jobs for exservicemen.⁶⁷ Women were demonised to pressure them out of employment because when men

⁶¹ Elsa Thomas, *Imperial War Museum*, Reel 3.

⁶² Bartley, Votes for Women, p.99.

⁶³ Marian White, 'Dear Editor', The *Woman Worker* (January 1917), Copy held in Gateshead Library, Tom Marshall Collection, TMC37/04.

⁶⁴ Ibid.

⁶⁵ Lily Truphet, Recorded 04/03/1975, *Imperial War Museum*, Catalogue Number 693, Reel 1 and Reel 3.

⁶⁶ 'Women and War Work', *The Manchester Guardian*.

⁶⁷ Culleton, Working-Class Culture, p.2.

returned they symbolised a shift back towards traditional pre-war gender and social structures. Margaret and Patrice Higonnet's explanation of the 'double helix' effect explains why female munitions workers felt such a backlash when they had once been the epitome of female selflessness.⁶⁸ Margaret and Patrice Higonnet claim that in a patriarchal society women can progress, however, men's work would always be more respected, so when ex-servicemen returned, their need for employment superseded women's, which can be clearly seen in the munitions industry.⁶⁹ The change in perception of female munitions workers displays that even though women had been put in dangerous situations and labelled as patriotic by the government, gendered stereotypes persisted, they were simply less prominent during the emergencies of war. Forcing women back into traditional female occupations, such as domestic service, created conflicts for women who felt pushed out of their jobs. Through such quick dismissals of female munitions workers their position as a peripheral workforce was highlighted, and the vilification of them meant their efforts during the war were diminished and women were being forced back into the cage.

 ⁶⁸ Margaret Higonnet and Patrice Higonnet, 'The Double Helix', in Margaret Higonnet et al. (eds.) *Behind the Lines: Gender in the Two World Wars* (London: Yale University Press, 1987), pp.34-6.
 ⁶⁹ Ibid.

Conclusion

Despite the common image of female munitions workers as being a highly liberated group who were directly challenging gender roles and gaining emancipation for their sex, the research suggests that women in munitions factories were still restricted by various perceptions, regulations and prejudices, all of which affected their experience within the factory. Marwick's insistence that 'war gave emancipation to women', does not reflect the experience of munitions workers.¹ Braybon's view of a lack of transformation for women and a 'mythology' surrounding their liberation of the period is more in line with female munitions workers experiences.²

Gender divisions spilled over from wider society and permeated into the munitions factories. Women's experience was not a unified one, their gender, just like prior to the outbreak of war, affected which roles women gained. Although women did enter some traditionally male jobs, they were allowed to do so out of necessity rather than a radical change of attitudes towards their competencies. The constant intrusion and extension of paternalism from factories and the state reinforced the image of women being incapable of independence and reliant upon males for security and leadership, suggesting the environment within munitions factories was not necessarily one of emancipation for women and that societal attitudes towards them had not changed. The image of women being able to undertake men's work was temporary and changed again once women's labour was no longer needed, as essentially women were still classified as peripheral workers within society. Women were pushed back into their traditional pre-war roles, reinstating the patriarchal structure of society. Women had only managed to escape one form of patriarchy in the domestic sphere but moved into the 'public patriarchy' of munitions factories, which could be just as oppressive and prejudiced.³

¹ Marwick, Britain in the Century of Total War, pp.106-108.

² Braybon, *Women Workers*, p.229.

³ Walby, *Theorizing Patriarchy*, pp.23-24.

The issue of class was another factor influencing the experience of women within munitions. Class affected more than just the role women achieved, but also impacted upon their recreation time and living accommodation, highlighting the class divisions within munitions factories, just as they were in wider society. Despite Watson viewing munitions factories as a 'melting pot' of social classes, it was not what women experienced. Braybon's suggestions of a 'coherent group' of working class women is also not representative of working class munitions women, who also experienced tensions within their own class.⁴ Many accounts explained different hierarchies within the factory, with very little mixing between the classes and even sometimes within their own classes women were fragmented into different groups according to workshop, role and even bench.

The public opinion of munitions changed throughout the war. Women went from being the saviour of the nation to a hindrance for denying men from returning to their traditional role in society. The perception of women in munitions was used as a political propaganda tool to manipulate society to accept women into 'men's' work when the necessity of war demanded it, and subsequently to vilify the very same women when they were no longer needed to ensure society returned to the pre-war state of traditional gender roles. The first-hand accounts confirm Braybon's theory of women being 'recruited reluctantly' when there was no labour alternative, hence why the perception of female munitions workers was presented so positively as patriotic heroism, and once war was over women were dismissed 'as soon as possible'.⁵ There had been no real emancipation for women, just a façade of liberation that was shattered once the war emergencies were over.

The female experience within the munitions factory is not easy to distinguish, they were not a cohesive group and experience differed dramatically depending on class, gender, role or societal demand for labour. First-hand accounts and other findings support Braybon and Summerfield's hypothesis of a continuity for women during and after World War One, as the women were subject to gender and class prejudices during their time in munitions factories, as paternalism and class

⁴ Braybon, *Women Workers*, p.13.

⁵ Ibid, p.229.

hierarchies were also in place, and once women left munitions they were pressured back into traditional roles in society.⁶ Woollacott's insistence on munitions work for women being a positive experience allowing 'mobility...independence, and assertiveness' does not necessarily correlate with the full experience for munitions workers.⁷ Women did gain some independence from being able to move away, earn slightly higher wages and work in 'men's' jobs, however, they were subject to gender and class prejudices and hierarchies which constricted their experience and meant that in many cases working in munitions factories could be just as restrictive as wider society.

⁶ Braybon and Summerfield, *Out of the Cage*, pp.286-7.

⁷ Woollacott, *On Her Their Lives Depend*, p.215.

Appendices

Appendix 1:

Munitions recruitment poster 'These Women Are Doing Their Bit', 1916, *Imperial War Museum*, Catalogue number Art.IWMPST3283.



Bibliography

Primary Sources

Interviews

Bowan Pease, Helen, Recorded 1976, *Imperial War Museum*, Catalogue Number 821. Bradbury, Frank, Recorded 01/07/1975, *Imperial War Museum*, Catalogue Number 675. Gilbert, Kathleen, Recorded 30/09/1985, *Imperial War Museum*, Catalogue number 9105. Ginns, George, Recorded 1976, *Imperial War Museum*, Catalogue Number 775. McIntyre, Elsie, Recorded 02/07/1975, *Imperial War Museum*, Catalogue Number 673. Oxley, Henry, Recorded 1975, *Imperial War Museum*, Catalogue Number 716. Rennels, Caroline, Recorded 19/02/1975, *Imperial War Museum*, Catalogue Number 566. Thomas, Elsa, Recorded 15/01/1975 *Imperial War Museum*, Catalogue Number 676.

Newspapers

'500 Champions of Womanly Beauty', *The Daily Mirror*, 6th November 1918.

'Angry Munitions Girls', The Daily Mirror, 6th November 1918.

'Explosions at Munitions Factories', The Manchester Guardian, 28th April 1917.

'Munition Makers Tour', *The Times*, 22nd November 1916.

'North London Explosion' *The Observer*, 13th October 1918.

'Revolt of the Seven Shell Girls', Daily Express, 14th February 1917.

'Women and Munitions: The Health Question', *The Times*, 5th May 1916.

'Women and War Work: Mr Lloyd George and the Government's Desire', The Manchester Guardian,

19th July 1915.

Magazines and Periodicals

- A Lady Worker, 'Behind the Firing Line: Some Experiences in a Munition Factory', *Blackwoods Magazine* (1916).
- Kennard, Lady, 'England's Feminine War Worker', North American Review, Vol.207, No.751 (1918).
- Ramsbottom, I., 'Women in Industry- Some Pioneer Work', *The Shell Magazine*, No. 1 (Dec 1917), Trench Journals and Unit Magazines of the First World War.
- Rathbone, Kate, 'The Mobilization of Women', *Women's Volunteer Reserve Magazine* (Oct 1917), Trench Journals and Unit Magazines of the First World War.

Archival Material

- A Woman Assessor, *Women in the Munitions Courts*, copy held in Gateshead Library, Tom Marshall Collection, in TMC46/02.
- Horner, 'A Glimpse of War Work', *Time Remembered*, copy held in Gateshead Library, Tom Marshall Collection, TMC 37/03.
- 'New Club for Girls in Gateshead', 17th October 1915, Newspaper cuttings, A.G. Vol.1, bound copies in Gateshead Library, 908.9 SB007993.
- Rowntree, Seebohm, 'Welfare Work for Women in Munitions Factories', *Progress*, Vol.11, No.4 (October 1916), copy held in Gateshead Library, Tom Marshall Collection, TMC38/02.
- 'The Welfare of Munitions Workers', 8th September 1916, *Engineering,* Copy held at Gateshead Library, Tom Marshall Collection, TMC 39/03.

'These Women Are Doing Their Bit', 1916, *Imperial War Museum*, Catalogue number Art.IWMPST3283.

- White, Marian, 'Dear Editor', The *Woman Worker* (January 1917), Copy held in Gateshead Library, Tom Marshall Collection, in TMC37/04.
- *Woman Worker Magazine* (Dec 1916), copy held in Gateshead Library, Tom Marshall Collection, TMC 37/04.

Memoirs

Gore, Elizabeth, The Better Fight: The Story of Dame Lillian Barker (London: Geoffrey Bles, 1965).

- Kedge, Alice, Memoirs 1915, in Marlow, Joyce, (ed.), The Virago Book of Women and the Great War (London: Virago Press, 1998).
- Loughnan, Naomi, in Marlow, Joyce, (ed.), *The Virago Book of Women and the Great War* (London: Virago Press, 1998).
- Pankhurst, E.S., *The Home Front: A Mirror to life in England during the First World War* (London: Hutchinson, 1987).
- Williams, Joan, A Munition Worker's Career at Messrs Gwynne's-Chiswick, 1915-1919, Adam
 Matthew First World War Archive,
 [http://www.firstworldwar.amdigital.co.uk/Documents/SearchDetails/IWM_23_41_3_WJ#Snippi

ts], Accessed 14/12/2015.

Government Documents

Ministry of Munitions, Health of the Munitions Worker, (London: HMSO, 1917).

Other Publications

Bedford, Madeline, 'Munitions Wages', in Reilly, Catherine, (ed.), *Scars upon My Heart: Women's Poetry and Verse of the First World War* (London: Virago Press, 1981).

Ford, Isabella, 'Middle Class Women in Factories', *Daily News and Leader*, 14th December 1915, in Marlow, Joyce, (ed.), *The Virago Book of Women and the Great War 1914-1918* (London: Virago Press, 1998).

McLaren, Barbara, Women of the War (London: Hodder and Stoughton, 1917).

Yates, LK., The Woman's Part: A Record of Munitions Work (London: Hodder and Stoughton, 1918).

Secondary Sources

Bartley, Paula, Votes for Women: 1860-1928 (London: Hodder and Stoughton, 1998).

Beddoe, Deirdre, *Back to Home and Duty: Women Between the Wars 1918-1939* (London: Pandora, 1989).

Braybon, Gail, Women Workers in the First World War (London: Routledge, 2013).

Braybon, Gail and Summerfield, Penny, *Out of the Cage: Women's Experience in Two World Wars* (Abingdon: Routledge, 2013).

Burley, Sue, Women in Britain Since 1900 (Basingstoke: Palgrave, 1999).

Clapham, Irene, Towards Sex Freedom (London: John Lane, 1935).

- Cocroft, Wayne D., 'First World War Explosives Manufacture: The British Experience', in Macleod, Roy, and Allan Johnson, Jeffrey, (eds.), *Frontline and Factory: Comparative Perspectives on the Chemical Industry at War 1914-1924* (Dordrecht: Springer, 2006).
- Culleton, Clare, *Working-Class Culture: Women and Britain 1914-1921* (Basingstoke: Macmillan, 2000).
- Grayzel, Susan, 'Liberating Women? Examining Gender, Masculinity and Sexuality in First World War Britain and France', in Braybon, Gail, (ed.), *Evidence, History and the Great War: Historians and the impact of 1914-1918* (Oxford: Berghahm Books, 2008).
- Higonnet, Margaret and Higonnet, Patrice, 'The Double Helix', in Higonnet, Margaret, et al. (eds.) Behind the Lines: Gender in the Two World Wars (London: Yale University Press, 1987).
- Hunt, Cathy, 'Sex Versus Class in Two British Trade Unions in the Early Twentieth Century', in *Journal of Women's History*, Vol.24, No.1. (2012).
- Long, Vicky, 'Industrial Homes, Domestic Factories: The Convergence of Public and Private Space in Interwar Britain', *Journal of British Studies*, Vol.50, No.2 (2011).

- Marwick, Arthur, *Britain in the Century of Total War: Peace and Social Change 1900-1967* (London: Penguin Books Ltd, 1970).
- Melling, Ali, 'Wartime Opportunities: Ladies Football in the First World War Factories', in Mangan, J A., (ed.), *Militarism, Sport, Europe: War without Weapons* (London: Frank Cass Publishers, 2003).
- Noakes, Lucy 'Demobilising the Military Woman: Constructions of Class and Gender in Britain after the First World War', *Gender and History*, Vol.19, No.1 (2007).
- Pugh, Martin, Women and the Women's Movement in Britain 1914-1999 (Basingstoke: Macmillan Press, 2000).
- Simmonds, Alan V., Britain and World War One (Hoboken: Taylor and Francis, 2013).
- Thomson, Alistair, 'Unreliable Memories? The Use and Abuse of Oral History' in Lamont, William(ed.), *Historical Controversies and Historians*, (London: Rutledge, 1998).
- Walby, Sylvia, Gender Transformations (London: Routledge, 1997).
- Walby Sylvia, *Theorizing Patriarchy* (Oxford: Blackwell, 1990).
- Watson, Janet, Fighting Different Wars: Experience, Memory and the First World War in Britain (Cambridge, Cambridge University Press, 2006).
- Williams, Jean, 'The Fastest Growing Sport? Women's Football in England?', *Soccer and Society*, Vol.4, No.2 (2003).

Woollacott, Angela, On Her Their Lives Depend: Munitions Workers in the Great War (Berkeley: University of California Press LTD, 1994).