Opening the Tin: Women in the South Wales Tinplate Industry c.1880s-1940s

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Opening the Tin: Women in the South Wales Tinplate Industry c.1880s-1940s.

Josephine Richards
Dedication

This dissertation is dedicated to my mother, Jill Mary Richards, and father David Ralph Richards.

For inspiring my love of learning and libraries.

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Chapter One: Introduction

The dissertation aims to better understand how women in South-West Wales saw themselves, and were seen by others, once they became part of the tinplate workforce. These specific question of the dissertation is as follows. How was the women’s status affected by their work? Findings are discussed within the framework of relevant historiography.

The period for investigation, c1880s-1940s, has allowed access to a range of primary resources during a period of variable world demand for tinplate. This time frame also includes the Industrial Revolution in Wales, First and Second World Wars, 1914-18 and 1939-45 respectively, and major changes to women’s position in society more generally. The dissertation refers to primary and secondary source material throughout, in order to build a picture of the women from different perspectives. Official inspection reports, newspapers, archival material including visual sources and, where possible, first-hand accounts from women and men tinplate workers have all been studied. The issue of status is explored by comparing and contrasting the various viewpoints.

This opening chapter one includes background information regarding the tinplate industry in the Llanelli and Swansea area, a review of historiography and a brief introduction to the content of subsequent chapters. Chapters two, three and four comprise the research undertaken and interpreted, including in the light of existing historiography, followed by chapter 5, the dissertation conclusion.
During the late nineteenth and early twentieth centuries Llanelli and the surrounding areas became known as ‘Tinopolis’ due to the concentration of tinplate works and their large output.¹ In Llanelli in 1889 ‘there were ninety-six tinplate works producing over half a million tons of tinplate’.² Paul Jenkins, writing in 1995 and previously employed as a manager at Port Talbot British Steel, provides a historical, technical and geographical overview of the South Wales industry. He highlights Llanelli as a centre of innovation. For example, the first use of steel as the base metal for tinplating instead of iron occurred at the Dafen works in 1856.³ Tinplate was widely used including for domestic and other purposes during wartime.⁴ Of particular importance were the iron, and later steel, tinplated sealed cans which were ideally suited for food storage and preservation and supplied growing populations, British commercial and Naval shipping, and Arctic expeditions.⁵ The Welsh tinplate industry of Llanelli and neighbouring Swansea boomed internationally until the McKinley tariffs imposed by the American Congress in 1890.⁶ However, despite overseas competition and tariffs, the Welsh industry consolidated and adapted successfully until the 1960s, by which time tinplate production had fallen dramatically.⁷

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⁴ Museum of Wales Collections Online/Industry/Tinplate. Available at: Collections Online | National Museum Wales.
⁶ Jenkins, Jenkins, Twenty by Fourteen: A history of the South Wales Tinplate Industry 1719-61, p40.
Graces Guide (2016) Llanelly Associated Tinplate Companies. Available at:
In 1988 Chris Williams noted that, despite the significance of the Welsh tinplate and other industries as contributors to wealth generation during the Industrial Revolution, historians have tended to focus primarily on the South Wales coal industry. This has in turn minimised the study of women industrial workers, because coal production offered few employment opportunities for women during the nineteenth and early twentieth centuries. For example, Dot Jones’ work on women in the Rhondda coalfields in 1881-1911 focused primarily on the domestic context. Furthermore, Beddoe notes that in both the 1901 and 1911 census only 23.6 percent of women in Wales were in employment compared to 32.8 percent in England, with most concentrated in domestic service. However, in the Welsh tinplate industry there were specific roles occupied by women during the production process and up to 25 percent of workers were female in 1890 according to Jones and Lewis. These specific occupations included ‘Pickling’, ‘Opening’, also known as ‘Separating’ which were integral to tinplate production, and recognised in the British nineteenth and twentieth century Census data collections.

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**Llanelly Associated Tinplate Companies - Graces Guide**


An updated literature search via The Open University library confirmed a continuing relative lack of historical research about the South Wales women tinplate workers as compared to other groups, particularly those in coalmining communities. This is despite the welcome growing interest in Welsh women’s history. One of the few studies is by Jones and Lewis is an important case study of a Llanelli woman tinplate ‘Opener’ Hattie Williams who migrated to Pittsburgh in 1895. Williams was a special case due to being a migrant. Nevertheless, this important paper has highlighted areas of conflict around conventional gender relations at the time, and within the industry. It will be discussed throughout the dissertation because it provides a platform for further research and discussion. Jones and Lewis also discussed their research with reference to gendered historiography. A gendered approach to women’s history has been an important development in women’s history. It involves understanding how gender relationships and notions of masculinity and femininity at any given time in history, have affected women’s experiences and participation in their society. Sue Bruley provides a helpful overview.

Several historians have written about the negative connotations applied to working class women who worked outside the home during the late nineteenth and early twentieth

14 Beddoe, Out of The Shadows: A history of Women in Twentieth Century Wales, p.4.
Available at: The Women and Men of 1926: A Gender and Social History of the General Stri___: EBSCOhost (open.ac.uk).
Beddoe described how women and men in Wales during the nineteenth century were expected to occupy separate spheres, with men working outside the home and women confined to the roles of wife and mother. The stereotype of the domesticated, capable and stoical Welsh Mam is often seen as having been a particularly unhelpful influence in defining Welsh women’s identity and mitigating against opportunities for women to work outside the home. Anne Pollert researching across Britain, and Judith Hunt have also addressed similar issues and gone further by suggesting that women working in factories or heavy industry experienced a form of undermining and powerlessness. The dissertation’s focus on the issue of status is addressed in relation to existing approaches to women’s historiography.

Chapter two of the dissertation investigates and discusses the details of the tasks performed by women tinplate workers. The primary sources used provide a route into understanding how the women were represented at the time.

Chapter three examines whether the labelling of women’s work as unskilled, alongside poor pay and conditions created a narrative of their low status. The extraordinarily harsh and

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21 Anne Pollert, researching during the 1970s, has gone so far as to argue that heavy manual work was so inconsistent with contemporary values concerning gender and class that it undermined women’s self-image. Judith Hunt has developed a similar argument which concluded that factory work creates a ‘reinforcement of women’s powerlessness to change their role’.

dangerous conditions faced by Welsh tinplate workers, which only gradually improved over time, have been outlined by Smith in the science journal *Anti-Corrosion Methods and Materials*.\(^{22}\) Tinplate workers, including women, were exposed to very high temperatures, chemicals, including sulphuric acid and other air-borne fumes as well as lifting and carrying heavy loads of metal sheets, all associated with risks of accidents and burns.\(^{23}\) As indicated in Smith’s paper, this is a large and specialist area of study which the dissertation will not examine in its entirety. However, the immense occupational hazards faced by tinplate women workers in this economically important Welsh industry provides a powerful impetus and context to the dissertation’s main question about status. The issues of pay and perceived skill levels are discussed against the backdrop of these poor working conditions.

Chapter four builds on the information gleaned in chapters two and three and presents further evidence, and concentrates on the issue of the perceived status of the women in the Welsh tinplate industry who worked alongside men. The dissertation looks at how these women saw themselves and were viewed by others such as official bodies and male members of their communities.

Chapter five offers the dissertation conclusion. Beddoes’s ‘doctrine of separate spheres’ is a well-argued and accepted model of gender relations applied to late nineteenth and early


twentieth century Wales. The dissertation revisits how this, and other arguments concerning how women’s own sense of gender identity and social status was affected by working in factories and heavy industry. The dissertation concludes by discussing the evidence collected within the context of existing debates, theories and research.

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Chapter Two: A forgotten workforce rediscovered

This chapter will examine the experience of Welsh women tin-plate workers and how they were portrayed and seen by others. It is firstly important to gain some very basic understanding of the process as a whole in order to explore women’s specific roles and investigate how they were perceived. The tinplate works comprised numerous different sections each containing equipment, for example furnaces, rollers, pickling tanks operated by different workers and appropriate to the relevant tasks. This spatial complexity associated with the divisions of the manufacturing process are illustrated by Collis & Hilitch in their 1912 Report and more recently in 1995 by Paul Jenkins. The final products were tinplate sheets measuring twenty by fourteen, or ten inches. These dimensions comprise the title of an anonymous folk poem which Jenkins used as a tribute to ‘these men of steel’ in his final comments on the history of the industry.

Jenkin’s had previously held a managerial role as mentioned in chapter one and yet the poem omits mention of the women workers. The complexity of the process and the heavy reliance on labour would have meant that large numbers of workers were needed. This demand for labour would have meant that women and indeed children were needed and essential to the process. Furthermore, women’s wages were generally lower than those of men workers. This would also have made them attractive to employers. Furthermore,

26 (See Fig.1.) Collis & Hilitch, ‘General Plan of Tinplate Work’ ‘Report of the Conditions of Employment in the Manufacture of Tinplate’ Fig. 1, p.6. Jenkins, ‘Plan of Dyffryn Works, Morriston, c.1920-1953’, Twenty by Fourteen: A history of the South Wales Tinplate Industry 1719-1961, p.133.
women needed to work as their wages were needed to support working class households. The specific tasks allocated to women are represented in varying ways according to the sources consulted. However, a clear picture emerges of their work using sharp implements and toxic substances. Women were primarily involved in Opening, also known as Separating, and Pickling. Opening involved pulling apart the tin plates or sheets, which had been previously rolled flat by the male mill crew and become stuck together. The women used large knives or shears. Once separated the plates were pickled, which involved dipping them in sulphuric acid to dissolve scale, rust and dirt residue.

First-hand accounts provide historians with information which is close to the work itself and direct experiences. A search for oral and written primary sources from Welsh workers in the South Wales industry led to a limited number of readily available material relating to the late nineteenth and very early twentieth century. This is likely to be due to the restricted opportunities for working class Welsh people and especially women to self-educate or self-improve for a variety of reasons. For girls, state education system offered little beyond what was needed for domestic management until 1914. Furthermore, as adult women, whether employed outside the home or not, the entire responsibility for child rearing and domestic tasks fell to women alone. There would have been scant opportunities to

engage in writing about or reflecting on their lives or work experiences, particularly before birth control advice became available in 1930.34

In one of the few pieces of published academic research into women tinplate workers, Owen-Jones interviewed Llanelli women workers in 1981 about their work experiences between 1930-50.35 In this oral history paper Owen-Jones selected different fragments from her interviews which portray a generally negative experience. A woman named Joyce Lee declared ‘I thought it was the most degrading job’.36 Inevitably qualitative research such as this involves a highly selective process in compiling and analysing data, which may introduce bias. Hence it is important to directly access primary sources in their entirety where possible.

The National Museum of Wales (NMW) has archived William Morris’ more lively and compelling dramatized account of a working tinplate mill.37 Morris was an ex-tinplate worker who later became a newspaper correspondent.38 His dramatized dance version of the factory work, written in the 1960s, is based on his experience of working as a furnaceman in a Llanelli Mill mid-1910s to 1930.39 The piece, Old time dance on a hot tinplate mill floor, has credibility due to level of detail and Morris’ personal experience of working in the industry. His style of writing brings alive the heat, frenzy and extreme hard

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38 Jennifer Protheroe-Jones, email correspondence 14th January 2022 National Waterfront Museum.
39 Protheroe-Jones, email correspondence.
work of life in the tinplate mill, although as a script for a play there is strong focus on spectacle. However, the dance metaphor helps to recreate the interconnectedness of the different workers in the complex process of manufacture. Like Jenkins, Morris’ focused mainly on male workers, which inevitably has the effect of marginalising the women. He does include a short paragraph about the women workers and congratulates the shearers, ‘gallant action with sabres!...they deserve admirable mention in the history making’. However, his welcome acknowledgement and focus on their actual work is partly overshadowed by his interest in their breasts, ‘carried piles of sheets to their benches, about forty pounds at a time by hand and support of bosoms’.

In another NMW Archive transcript, Cecil Lewis, born in Morriston in 1913, recalled his mother and other female family members working in the industry. Lewis reported that the women performed work considered ‘lighter’, ‘pickling and carrying plates not so heavy as the mill plates’. Like the women in Owen-Jones study, his tone is generally negative, and he highlights the lack of other options for employment available to young women who needed to work. The economic difficulties for those who lived in the ‘Tinopolis’ area is a recurring theme in this investigation of women’s lives. Lewis’ account is informative in several ways because he includes detail about the women, their lives and work, but also

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40 Morris, Old tyme dance on a hot tinplate mill floor, pp. 1-4.
41 Morris, Old tyme dance on a hot tinplate mill floor, p.3.
43 Lewis, MWL archive no. 7244
44 Lewis, MWL archive no. 7244
expresses firm opinions. He links the physical effect the work had on their bodies with a process of degradation:

   Couldn’t walk home cause of the sweat you’d lost. Couldn’t eat your food, couldn’t sleep, too tired to sleep, too hungry to eat....... degrading work for a woman’

Lewis was speaking for himself, but his views may well be representative of how others in the South Wales tinplating communities saw the women workers. There is a strong sense in his words that heavy, dirty industrial work fundamentally undermined women. There is also unwitting testimony that, in contrast, he did not consider such work degrading for men. Lewis alerts historians to important underlying tensions at the time by confronting what he saw as the fundamental problem of the factory work; that it demeaned women, whilst also providing much needed family income. These frictions would be expected to influence other contemporary written and visual sources.

In order to delve deeper into the earlier period of this study, c.1880-1920s, it has been necessary to examine visual primary sources alongside the limited number of available personal accounts, such as that recorded by Cecil Lewis. A comparison of a photographic postcard from the 1900s of Swansea women tinplate Openers with an earlier painting by Thomas Henry Thomas (1834-1915) illustrates this point. There is limited information available concerning the 1900s postcard. However, although the women are posed, there is a strong sense of realism because they look fully equipped and attired for the work.

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45 Lewis, MWL archive no. 7244
46 (See Fig.2) Anon., National Museum of Wales, Anon., Tinplate workers at Swansea 1900. Available at: 7. Women in the Tinworks | National Museum Wales

(see Fig.3) Thomas Henry, Thomas, (1874) Pickling, Available at: Pickling - Collections Online | National Museum Wales
47 Anon., Tinplate workers at Swansea 1900
women look relatively young. This is consistent with evidence from census data from the late 1891, which indicated that most were aged between 14 and 22 years old.\textsuperscript{48} This corresponds to Owen-Jones paper which emphasised that until the 1930s women ceased work once they married.\textsuperscript{49} Their clothes are dirty, they wear protective materials on their hands and they carefully hold large knives which look specifically designed for cleaving functions, and accord with those mentioned by Morris and Jenkins above.\textsuperscript{50} The women are wearing men’s caps which suggests a conscious attempt to adopt elements of masculine attire as being appropriate to the nature of the work.\textsuperscript{51} What is not available in the photograph is a sense of the actual factory environment as it is taken outdoors, or clues about how the women felt about their situation; their facial expressions are difficult to interpret but they nevertheless present a striking, bold group and give the impression of staking their claim to the territory and the work.

The figures in H. Thomas painting, Pickling, have completely blank facial expressions and are situated inside the tinplate factory and engaged in work.\textsuperscript{52} However, the woman dipping plates have an appearance reminiscent of domestic duties such as washing up. They are not wearing any protective equipment and are relatively clean, well groomed, feminine and with hair exposed and the front figure wearing a red headscarf. Despite being in the factory environment there is no sense of the work being physically onerous, dirty or unpleasant.\textsuperscript{53}

\textsuperscript{48} Jones & Lewis, ‘Gender and Nationality among Welsh Tinplate Workers in Pittsburg: The Hattie Williams Affair 1895’ pp.179.
\textsuperscript{50} Jenkins, Twenty by Fourteen: A history of the South Wales Tinplate Industry 1719-1961, p262.
\textsuperscript{51} Morris, Old tyme dance on a hot tinplate mill floor, p3.
\textsuperscript{52} Anon., Tinplate workers at Swansea 1900.
\textsuperscript{53} Thomas, Pickling.

Thomas, Pickling.
According to Sherbo, Thomas was interested in Welsh culture and portraiture and partook in the Cardiff Art and Industry exhibition 1870. Given the dates involved it is possible he exhibited this painting, which created a sanitised representation of women’s involvement in this Welsh heavy industry. The influences and motivations behind his portrayal may be complex and it is unclear whether he actually visited the factory. However, it is likely he would have wanted to appeal to middle-class audiences. They in turn be expected to be more familiar with women working in domestic service, thus seen as more appropriate work for women. Hence, by approximating the factory to a domestic environment, Thomas would have reassured his audience that the women were suitably employed. Thus, although his painting helped contemporaries and historians understand the tasks involved in pickling, he does so in a way which celebrates traditional notions of femininity, and is removed from the onerous human or emotional element.

These different primary sources discussed so far and taken together suggest that women’s contributions to Welsh tinplate manufacture through their labour raised problems for some contemporaries. These women workers challenged traditional notions of femininity and what constituted appropriate women’s work. Cecil Lewis expressed his own discomfort head on when considering his female relatives’ experiences of harsh conditions. Owen-Jones’ later research also emphasises similar negative recollections from women workers concerning poor sense of status and self-respect. In contrast, although Thomas’ painting...

54 The Welsh Academy Encyclopaedia of Wales, Thomas Henry Thomas
55 Williams & Jones, 'Women at Work in Nineteenth Century Wales', p23. Williams and Jones describe the preponderance of Domestic Service amongst women in paid work in Wales according to 1871-1901 Census data.
forefronts women workers he completely omits the reality of hardships and hazards involved in their day-to-day work and creates an illusion of femininity and domesticity.\textsuperscript{56}

Even Jenkins, in his history of the industry and writing later in the twentieth century, showed signs of minimising and distorting women’s contributions as did Morris in his dramatic recreation.\textsuperscript{57} In the 1900s postcard photograph we glimpse how these women might have seen themselves at this time. This group can be described as the ‘women of steel’ in a re-working of the folk poem mentioned above.\textsuperscript{58} They wore men’s caps and may not have been smiling or looking especially proud, but, despite concerns such as those raised in later years by Cecil Lewis and Joyce Lee, neither do they look ashamed.\textsuperscript{59}

Overall, there is an emerging picture of divergent and in some instances anxious perspectives about the nature, effects and value of the work carried out by women tin plate workers. The next chapter three will build on the evidence so far regarding these different viewpoints, and look at conditions and pay in more detail. This will assist with answering the main question posed by this dissertation involving women’s status.

\begin{flushleft}
\textsuperscript{56} Lewis, MWL archive no. 7244
Thomas, \textit{Pickling}
\textsuperscript{57} Jenkins, \textit{Twenty by Fourteen: A history of the South Wales Tinplate Industry 1719-1961}
\textsuperscript{59} Anon., \textit{Tinplate workers at Swansea 1900}
\textsuperscript{59} Lewis, MWL archive no. 7244
\textsuperscript{59} Owen-Jones, ‘Women in the Tinplate Industry: Llanelli, 1930-1950.’ p.45
\end{flushleft}
Chapter Three: Women of Steel

This chapter will examine whether the labelling of women’s work as unskilled, alongside poor pay and conditions created a narrative of their low status.

As regards wages, The Equal Pay Act was not passed by Parliament until 1970, which date is well ahead of the reach of this dissertation.60 There is data regarding pay in the tinplate industry relating to the time period under review. Jenkin’s reproduction of a table from the 1906 enquiry into South Wales wages concerns men in the tinplate industry, although he also mentions female earnings, including for Openers, as being ‘disproportionately low’.61 Jones and Lewis reproduction of Minchinton’s 1893 table, ‘Comparison of American and Welsh Wage rates, 1893’ gives more detailed data regarding pay according to grades of labour in tinplate industries.62 However, it is unclear whether Minchinton’s figures relate to men only. As well as wages, these tables illustrate the very specific division of pay rates according to task. Furthermore, it is of note that women’s work in the industry was generally labelled as ‘unskilled’.63 It can be argued that divisions between skilled and unskilled work have long been used as a convenient method for describing tasks according to whether they were carried out primarily by either men or women respectively. This mechanism could then be used to justify differential pay rates, rather than whether the task were inherently more or less skilled.

63 Jones & Lewis, ‘Gender and Nationality among Welsh Tinplate Workers in Pittsburg: The Hattie Williams Affair,1895’, p189
This complexity concerning skill levels and gender is illustrated in the investigation of the first Welsh woman who was employed as a tinplate worker in Pittsburgh in the 1890s, Hattie Williams. American male dominated labour unions were concerned about the impact of women migrant tinplate workers such as Hattie Williams. This important research paper, first mentioned in chapter one, contains a somewhat dense discussion about how women’s work was conflated with unskilled work alongside low pay and low status, particularly by male dominated labour organisations.\textsuperscript{64} Although the paper is looking at Welsh migrant and American workers and events in Pittsburgh, the assumptions and working class male anxieties concerning skills, pay and gender had resonance in the Welsh industry and communities. A meeting of delegates of the Llanelli area tinplate dockers union in 1916 reported in the \textit{Cambria Daily Leader} illustrates this point:

..a resolution was passed against the employment of women in the tinplate industry without full consultation with the men’s representatives.\textsuperscript{65}

Turning to the hazardous and unhealthy working conditions women experienced; this information is readily available and permeates most primary sources, although expressed in very different manners. The 1912 \textit{Report of the Conditions of Employment in the Manufacture of Tinplate} involved two senior inspectors.\textsuperscript{66} Much of the report is devoted to the extreme temperatures, up to 102 degrees fahrenheit, fumes and accidents in the steel

\begin{footnotes}
\item[65] Anon, 1\textsuperscript{st} May 1915, ‘High Cost of Living’ \textit{The Cambian Daily Leader}, p3. Available at: \texttt{HIGH COST OF LIVING. - [1916-05-01] The Cambria Daily Leader - Welsh Newspapers (library.wales)}
\item[66] Collis & Hilitch, ‘Report of the Conditions of Employment in the Manufacture of Tinplate’
\end{footnotes}
mills and tin houses where men worked.\textsuperscript{67} For example, the inspectors noted that the ‘operatives’ complained of dust and fumes but countered ‘they may acquire by exposure some degree of immunity’.\textsuperscript{68} The impression created here is that although the inspectors were tasked with collecting evidence, the actual experiences of the workers tended to be minimised. A dismissive approach was also repeated in the assessment of the impact of chemical reactions due to acid fumes on the women Picklers’ teeth. For example, a Mr White from Swansea had noted in 1909, ‘in some instances blackening was noticed’. However, Mr White concluded that, ‘generally the girls have good teeth’, and the report then moves on to the next topic.\textsuperscript{69}

The inspectors’ approach to Picklers’ exposure to acid fumes seemed complacent generally. The report quotes a 1901 inspection Report from a Dr Legge:

\begin{quote}
It is well known that persons in a short time become quite accustomed to the atmosphere containing a very slight percentage of sulphuric acid.\textsuperscript{70}
\end{quote}

It is not clear who these witnesses were or what constituted a ‘slight percentage of sulphuric acid’ but their opinions about the women’s teeth and exposure to acid fumes were accepted by the inspectors without further action taken. This inspection report contrasts with a newspaper report in the \textit{South Wales Daily News} in 1898 which quotes directly from an American journalist who visited South Wales and wrote about the Swansea tinplate industry. The visitor described, ‘young women...with handkerchiefs tied over their

\textsuperscript{67} Collis & Hilitch, ‘\textit{Report of the Conditions of Employment in the Manufacture of Tinplate}’pp.11,14,19
\textsuperscript{68} Collis & Hilitch, ‘\textit{Report of the Conditions of Employment in the Manufacture of Tinplate}’p.19
\textsuperscript{69} Collis & Hilitch, ‘\textit{Report of the Conditions of Employment in the Manufacture of Tinplate}’p.6.
\textsuperscript{70} Collis & Hilitch, ‘\textit{Report of the Conditions of Employment in the Manufacture of Tinplate}’p.7
mouts to keep out poisonous fumes...in the pickling vats’. The Welsh columnist described the American’s piece as inhuman, untruthful and ‘sensation filled’, whilst also acknowledging the difficulties the industry was having at the time very largely due to the American McKinley Tariffs. There were clearly strong feelings on both sides of the Atlantic concerning these tariffs at the time, which may well have influenced how the Welsh workers were seen by these two journalists. The Welsh journalist would be expected to be more personally connected, whilst the American more inclined to joke and exaggerate for the purpose of entertainment. Other comments provide evidence of the latter:

When a Swansea wife displeases her Swansea husband, her Swansea husband aims for the eye, and seems invariably to hit the mark. Some women had two black eyes.

Here the American reporter aimed for a farcical tone designed to mock rather than seriously examine the important issue of domestic violence.

The difficulties for historians aiming to gain a reliable picture of conditions for the Picklers are well illustrated by considering this newspaper article alongside the inspectors’ report. The newspaper piece contains sensationalist and contradictory viewpoints. In contrast, although the inspectors’ report purported to be a more thorough and evidence-based source, closer examination reveals likely bias. A more dispassionate view is to be expected from the later 1983 engineering paper, which reviewed the history of health problems in the

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72 Anon, ‘Swansea through Yankee Spectacles’
73 Anon, ‘Swansea through Yankee Spectacles’. 
tinplate industry and concluded, ‘conditions were suffered by workers at the turn of the (twentieth) century, they would be unacceptable today’.

As well as the specific problems associated with exposure to acids, there are many other instances where the reporting of conditions for women Openers and Picklers by the inspectors painted an overly-optimistic picture:

The (women) workers are not exposed to dust or high temperatures...they work at a distance from the hot rolls where there is free circulation of air from outside... The women and girls are generally clean, neat and fairly well shod.

This was in sharp contrast to Cecil Lewis description relating to a similar time-period:

Coming home - you could see them taking their shirts and dress off, and squeezing the perspiration out of it like - like running out of a tap.

A later first-hand account was recorded by Dafydd Llyr James of the BBC in 1993 and archived with the Welsh Museum of History. James interviewed Margaret Faud, born in 1912 who worked in a Swansea tinplate factory. A summary of the James’ interview, although not a direct transcript, is informative about details of conditions, ‘Started work in 1927...Very short meal breaks, had to sit amongst rats’. In contrast, the inspectors were not concerned about meal breaks.

74 Smith, ‘Health problems in the metal coating industries: A review of some health hazards in the metal coating industries since the 19th Century’ p15.
76 Lewis, MWL archive no. 7244
77 Meinwen Ruddock-Jones, Archivist, email correspondence 5th April 2022, St Fagans Museum of History.
For historians, reading these varying accounts of conditions and hazards, there is almost an impression they are at times relating to completely different settings. One explanation for the divergent information in the inspectors’ report is that the managers and owners of the factories ensured substantial preparation before the inspectors arrived. This might have included particular attention to the women’s appearance. It is also difficult to determine which specific factories in South Wales the inspectors visited and whether these correspond to the personal recollections of Lewis and Faud. Nevertheless, the instances of discrepancy are numerous, with primary and secondary sources unanimously contradicting the inspectors’ findings and therefore the official report must be viewed as unreliable, at least in some respects. Furthermore, this official report at times seems to reflect the opinions of the inspectors rather than the reality of the obvious health hazards, even taking into account the limits of scientific knowledge at the time. The report can be viewed as unwitting testimony of assumptions such as, that workers who complained of working conditions including dust and fumes, did not necessarily need to be taken too seriously. There is also the matter of the inspectors harbouring a bizarre set of beliefs involving how workers were able to acclimatise to direct exposure to chemical hazards and atmospheric pollution. These assumptions in turn suggest unwitting testimony that the inspectors entertained a degree of condescension verging on disrespect for working class people in this setting, both men and women. Furthermore, even though the official inspection did occur, suggesting an independent process, there would also be expected to be an underlying imperative to support, rather than undermine the Welsh tinplate industry for wider economic and political reasons. They may well have felt pressured to minimise and explain away problems. The Inspectors did make a limited number of recommendations as to
proposed regulations which should be adhered to. These included limits on weights carried by children. However, the recommendations comprised only a three quarters page Appendix in the twenty-seven page document, and none related specifically to the areas where women worked.\textsuperscript{80}

The evidence discussed above tells historians that health hazards and poor conditions were obvious to the women and their families, and reported indirectly and with different viewpoints and styles in a local newspaper. However, the problems were not being adequately addressed within the actual factories or even fully acknowledged by officials who were meant to be independent. There is also a strong unwitting suggestion that class-based ideologies about tinplate workers existed amongst official bodies such as the 1912 inspectorate, which may have reinforced a somewhat negligent approach to poor factory conditions. This lack of concern provides testimony of an exploitative environment which would be likely to affect how women workers valued themselves and their work. The American journalist also added to this sense of the women’s low value and status, even whilst in the process of apparently documenting their poor working conditions and experiences of domestic violence. In addition, the entrenched problem of women’s low pay which was justified in part by assigning their work as unskilled, also discussed above, would have compounded this sense of poor self and collective worth.

\textsuperscript{80} Collis & Hilitch, \textit{Report of the Conditions of Employment in the Manufacture of Tinplate’}, Appendix, p.27
The next chapter will investigate further this recurring issue of women’s status within the industry and local communities, and discuss findings within the framework of relevant historiography.
Chapter Four: ‘Had fun despite hard work’

This chapter will hone in on the issue of how the women’s status was affected by their employment in the tinplate industry.

The evidence presented in previous chapters has suggested that the Welsh women tinplate workers were seen, and in some instances, saw themselves as having low status. There are numerous examples in Owen-Jones oral history of Llanelli women respondents who addressed this particular issue and hence this study deserves further attention. The interviewee Megan Brown, who started work in the 1930s noted, ‘Slaver they called us’. Despite associating her work identity with slavery, it is important to consider that Megan is here referring to how others saw the women and does not specify who ‘they’ were. The same slavery metaphor was used by another respondent, Betty Walters, who began work in the 1940s:

Once you started as a tinworker it was very difficult to get out...you were then sort of branded.

These two women’s accounts fall towards the end of the time frame under discussion in this dissertation. Of note is that they saw themselves, even moving into the mid-twentieth century, as having been labelled with characteristics associated with slavery because they worked in tinplate factories. Also, the quotes raise the question as to who was doing the ‘branding’. Margaret Faud, who started work in tinplating in 1927 provided some possible

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81 St Fagans National Museum of History No. 7993/1-2.
answers in the summary of her BBC interview, ‘Men were ostracised if their wives
worked’.85 This quote tells historians more about how the community at large defined
women’s and men’s identity in relation to work, and created a strict narrative as to how
they should live their lives. Margaret here did not indicate whether she agreed with these
views and later seemed to challenge them. She referred to the effect of the war:

        War gave women a chance to earn their own money and became independent so
        some not in a hurry for war to finish.86

This quote indicates that once the Second World War got underway, women saw the work
as a means of raising rather than lowering their status. The Second World War was an
important turning point for women workers across Wales who were vital to the home front.
There is not scope in this dissertation to fully examine the social changes during either the
First or Second World Wars or interwar period.87 However, for the purposes of this research
question, it is useful to consider this wartime woman’s testimony, because she provides an
alternative perspective by looking outwards towards independence. This is in sharp
contrast to Betty Walters experience of feeling constrained and controlled.88

Paul Jenkins, the ex-British Steel manager and local historian, writing in 1995 and looking
back on his earlier career, was ideally situated to provide a view of women workers from

85 St Fagans National Museum of History No. 7993/1-2.
86 St Fagans National Museum of History No. 7993/1-2.
87 Brian Roberts,(1998-9).‘The ‘Budgie Train: Women and Wartime Munitions Work in a Mining Valley’, Llafur,
Vol 3-4. pp.143-152.
Roberts provides an overview of the tensions in Welsh mining communities arising from new- found
independence for young women during the second World War, who were recruited to munitions factories. He
addresses the processes of loosening of social and behavioural constraints for women which also attracted
moral condemnation. This study is focused on two mining communities, but similar issues would be expected
to have been evident in other working-class communities in Wales
inside the workplace. As a manager he would not be expected to mention ‘slavery’.

However, he observed:

Not only were the women workers oftentimes the equal of their male counterparts in the consumption of alcohol but also in the use of factory floor expressions… and harsh, uncompromising language’.  

Consumption of beer whilst at work was common according to Jenkins as a means of quenching the extreme thirst workers experienced. In the quote above he noted the women as ‘equal’ but in respect of what might also be seen as less desirable qualities. It is difficult to assess Jenkin’s 1995 tone as he had been both part of the workplace and community, but also operated as researcher and local historian at the time he was writing. He would also have been navigating any tensions between the local communities’ concerns as opposed to the tinplate management and owners’ need to employ women. However, the clear message was that the women tinplate workers were adopting male habits at work.

This accords with the postcard discussed in chapter two which showed women Openers wearing men’s caps. As discussed in chapter one, Beddoe formulated the theory of ‘separate spheres’ as a framework for economic and social lives of men and women in Welsh working-class communities during the late nineteenth and early twentieth century.  

Man’s sphere was the public domain of work and politics; woman’s sphere was the private world of home and family.

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89 Jenkins, Twenty by Fourteen: A history of the South Wales Tinplate Industry 1719-1961. p.171
91 Anon., Tinplate workers at Swansea 1900
93 Beddoe, Out of The Shadows: A history of Women in Twentieth Century Wales. P.12
The women described by Jenkins would have posed a direct challenge to any such ideology which had existed in the Swansea and Llanelli area at the time. He does not pass judgement on status but provides useful unwitting testimony. The characterisation of women tinplate workers who swore, drank beer and wore men’s caps suggests a sense of camaraderie and even high spirits amongst the women themselves. Their behaviour can be interpreted in a positive light as an indicator of how the women formed networks at work which enabled them to shape their own distinctive female culture in that arena. This is also consistent with Margaret Faud’s account, ‘Had fun despite hard work’.  

As discussed earlier, women’s first-hand accounts from the earlier time-period of this study, c.1880 onwards, are less readily available. One distinctive early voice came from Hattie Williams, the Welsh tinplate worker who had migrated to Pittsburgh in 1895. Her case study has already been referred to in chapter one alongside issues raised. To summarise, Hattie can be seen as a woman who directly challenged the notion that women who worked in the tinplate industry were inevitably disempowered. Her interview with an American local newspaper suggested high self-confidence and a strong sense of agency. The reporter described her as follows:

She is short, heavy set, rather good looking and looks capable of taking care of herself...Williams was proud of her skills and of the importance of teaching the occupation to other women.  

94 St Fagans National Museum of History No. 7993/1-2.  
95 Jones, & Lewis, ‘Gender and Nationality among Welsh Tinplate Workers in Pittsburg: The Hattie Williams Affair, 1895’ p182  
96 Jones, & Lewis, ‘Gender and Nationality among Welsh Tinplate Workers in Pittsburg: The Hattie Williams Affair, 1895’, p.182
Considering the above evidence together, there is a strong sense that the women workers themselves may have developed their own way of seeing themselves, which was at odds with their local Welsh community. Hattie Williams can be considered an outlier due to having migrated, but nevertheless her portrayal as a confident working woman is compelling. The other finding is that the women’s situation was not static. For example, wartime changed their self-perception even though, in the period leading up to the second world war, they still felt heavily controlled by local Welsh community values and judgements.97

Beddoe notes that there were factors in Wales which led to a, ‘particularly virulent strain of patriarchy’ underpinning the doctrine of separate spheres.98 For example, the notorious 1897 Report into the State of Education in Wales in 1847, had specifically targeted Welsh women’s so called poor morals as needing to be remedied and remained influential for many decades.99 Also, the influence of non-conformity and policing of behaviour by religious institutions such as chapels continued as late as the 1950s.100 Such factors would all be expected to be extremely influential in the Llanelli and Swansea areas. However, on closer examination of the evidence in this chapter there are signs that the tinplate women were able to move away from these oppressive belief systems, and develop their own culture and narratives. These included adopting male habits and clothing, having fun at work and taking pride in earning money and doing the job.

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97 Beddoe, Out of The Shadows: A history of Women in Twentieth Century Wales, p12.  
98 Beddoe, Out of The Shadows: A history of Women in Twentieth Century Wales, pp179-80  
99 Beddoe, Out of The Shadows: A history of Women in Twentieth Century Wales, p179.  
100 Beddoe, Out of The Shadows: A history of Women in Twentieth Century Wales. p180
Chapter Five: Conclusion

This dissertation examined primary and secondary sources to investigate the lives of women tinplate workers in South Wales c1880-1940s. The research has confirmed that these women have received relatively little attention from academics, particularly relating to the earlier time-period of this study. Locally based historians such as Peter Jenkins have provided useful and detailed descriptions of the industry overall from the 1700s, but paid less attention to women workers’ contributions. The information which is readily available confirmed that, although women’s wages were important to households, the women workers were seen as unskilled and paid less than men. However, a current day perspective of the work challenges this ‘unskilled’ label, given they were using large, sharp instruments, dealing with toxic substances and carrying out work which was essential to producing the much sought-after end product. Further investigation into archival material, other primary sources and a small number of research papers revealed diverse viewpoints concerning their work, and how it affected their status.

Several themes emerged from examination of first-hand accounts from workers, their families and others in their ‘tinopolis’ communities. A major concern was the extremely harsh and unhealthy factory conditions. However, the 1912 official inspection of tinplate factories report tended to minimise the harms for workers including women. This approach can be interpreted in several ways and may have reflected the inspectors’ bias in favour of middle class political or business interests. Illogical statements about the workers’ ability to tolerate extreme conditions suggested a negligent attitude. Hence, it can be argued that the

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101 Jenkins, Twenty by Fourteen: A history of the South Wales Tinplate Industry 1719-1961
report provides evidence of a system-wide process of degradation of individual workers; a way of seeing them which acquiesced and colluded with the damage to their health. 102

Interview transcripts from workers and relatives, covering their recollections from the First World War onwards, also described the women’s work as degrading. This provides important and explicit evidence in relation to the central question of this research about the women’s status. A job seen as degrading would not be expected to be viewed as high status. These voices appeared to reflect a wider set of judgements concerning what were considered suitable roles for women at the time, with tinplate factory work seen as unsuitable. The testimony also implied that such work would, in contrast be more suitable for men. The work of the artist T.H Thomas (1834-1915) can also be interpreted as evidence of how women working in heavy industry created unease. Thomas painted manufactured versions of the women workers which were sanitised and domesticated, but would therefore have appealed to Victorian middle-class notions of what constituted suitable women’s paid work. 103

Some of the evidence collected in this research contradicted the low status label attached to the women workers. The case study of the Welsh woman tinplate worker, Hattie Williams, who migrated to Pittsburgh in 1895 is compelling evidence. The Jones and Lewis article referred to a newspaper interview with Hattie which described her as a confident woman who was proud of her work, ‘short, heavy set, rather good looking and looks capable of

102 Collis & Hilitch, ‘Report of the Conditions of Employment in the Manufacture of Tinplate’
103 Thomas, Pickling
taking care of herself’. 104 The 1900s postcard photograph which shows a group of Welsh women tinplate workers seemed to resemble Hattie’s description. The group in the photograph also bring additional qualities which suggest competence and skills in that they are equipped with shears and wear protective clothing. They had constructed a particular identity by opting to wear men’s caps. 105 This latter also chimes with Peter Jenkins later first-hand observations of women swearing and drinking alcohol when at work which he saw as masculine behaviour. 106 The photograph and Jenkin’s description both suggest the women were adapting to their place in their work environment by deliberate means, in order to create a specific image and identity. This involved adopting elements of masculinity in a non-domestic work setting which would be contrary to Beddoe’s doctrine of separate spheres’. 107 It seems likely therefore, that women who did positively embrace their factory workplace in this way would have made others in their communities uncomfortable. Thomas’ painting indicated that this discomfort was also reflected within middle class cultural arenas.

The dissertation found that many accounts by women tinplate workers reflected an acute awareness of how the wider community looked down on them. Their testimonies resonated with Beddoe’s analysis of the non-conformist religious, and patriarchal pressures on Welsh women which positioned women exclusively as wives and mothers. However, by focusing in on Hattie Williams and the women in the 1900s postcard, there are also strong

105 Anon., Tinplate workers at Swansea 1900
hints of how they may have seen their work as offering a positive alternative role to that of domestic drudgery. This was articulated more clearly as time went on and influenced by social and employment changes during the Second World War. By the Second World War, Margaret Faud was clear that tinplate work offered opportunities. ‘War gave women a chance to earn their own money and become independent’. Faud’s words can be seen as reflecting her sense of improved status through work.

In conclusion, the Welsh tinplate factories of the late nineteenth and early twentieth centuries were extremely harsh and unhealthy environments. However, this dissertation has demonstrated that by entering these workplaces there were opportunities for women to expand their identities beyond the purely domestic, and thereby improve their sense of status. This was despite the cacophony of voices, many from within their own communities which framed their work as low status, unskilled, degrading and unsuitable for women. The dissertation has indicated that the period from the late nineteenth century and up to and including the Second World War is a feasible time frame for studying Welsh women tinplate workers. Relevant primary sources were available. Further research using museum and other Welsh archives, some of which may not have been digitalised, would assist historians understand more detail about the lives of this important group of women workers.

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Appendix

Fig.1. Collis EL & Hilitch, J (1912) Fig 1, ‘General Plan of Tinplate Work’ ‘Report of the Conditions of Employment in the Manufacture of Tinplate’ England: HMSO, Figure 1, p6

Available at:

U.K. Parliamentary Papers document (open.ac.uk)
Fig. 2 Tinplate workers at Swansea in the 1900s. The rolling of the sheets of tinplate was done by men, but many women were also employed to separate the sheets during rolling. This was done using sword-like tools known as hangars.

Available at:

Tinplate workers at Swansea 1900

https://museum.wales/welsh_womans_history/7_tinworks/

Accessed: 23rd May 2022
Fig. 3 Thomas, Thomas Henry (1834-1915), *Pickling*:

Available at:

[Pickling - Collections Online | National Museum Wales](#)

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