The "knowledge front", women, war and peace

Julia Horne
Department of History, University of Sydney, Sydney, Australia

Received 14 January 2016
Revised 3 April 2016
Accepted 11 April 2016

Abstract

Purpose – The purpose of this paper is to introduce the idea of the "knowledge front" alongside ideas of "home" and "war" front as a way of understanding the expertise of university-educated women in an examination of the First World War and its aftermath. The paper explores the professional lives of two women, the medical researcher, Elsie Dalyell, and the teacher, feminist and unionist, Lucy Woodcock. The paper examines their professional lives and acquisition and use of university expertise both on the war and home fronts, and shows how women's intellectual and scientific activity established during the war continued long after as a way to repair what many believed to be a society damaged by war. It argues that the idea of "knowledge front" reveals a continuity of intellectual and scientific activity from war to peace, and offers "space" to examine the professional lives of university-educated women in this period.

Design/methodology/approach – The paper is structured as an analytical narrative interweaving the professional lives of two women, medical researcher Elsie Dalyell and teacher/unionist Lucy Woodcock to illuminate the contributions of university-educated women's expertise from 1914 to the outbreak of the Second World War.

Findings – The emergence of university-educated women in the First World War and the interwar years participated in the civic structure of Australian society in innovative and important ways that challenged the "soldier citizen" ethos of this era. The paper offers a way to examine university-educated women's professional lives as they unfolded during the course of war and peace that focuses on what they did with their expertise. Thus, the "knowledge front" provides more ways to examine these lives than the more narrowly articulated ideas of "home" and "war" front.

Research limitations/implications – The idea of the "knowledge front" applied to women in this paper also has implications for how to analyse the meaning of the First World War-focused university expertise more generally both during war and peace.

Practical implications – The usual view of women's participation in war is as nurses in field hospitals. This paper broadens the notion of war to see war as having many interconnected fronts including the battle front and home front (Beaumont, 2013). By doing so, not only can we see a much larger involvement of women in the war, but we also see the involvement of university-educated women.

Social implications – The paper shows that while the guns may have ceased on 11 November 1918, women's lives continued as they grappled with their war experience and aimed to reassert their professional lives in Australian society in the 1920s and 1930s.

Originality/value – The paper contains original biographical research of the lives of two women. It also conceptualises the idea of "knowledge front" in terms of war/home front to examine how the expertise of university-educated career women contributed to the social fabric of a nation recovering from war.

Keywords Universities, Elsie Jean Dalyell, Home front, Knowledge front, Lucy Godiva Woodcock, War front, Women doctors, Women teachers, Women's history, First World War

Paper type Research paper

On the front of war, home and knowledge

The year 1906 was a pivotal one for the careers of Elsie Jean Dalyell and Lucy Godiva Woodcock: 24-year-old Dalyell resigned as a public school teacher to take up the study of medicine at the University of Sydney, while the 16-year-old Woodcock became a pupil teacher. Each wanted to enter a profession that would give status and an income, and take advantage of the changing economic and social circumstances of an Australia

History of Education Review
Vol. 45 No. 2, 2016
pp. 151-167

0819-8691
DOI 10.1108/HER-01-2016-0004

that had given women the vote just a few years earlier. In 1914, however, war intervened and provided unexpected opportunities for each. When war broke out, the 32-year-old Dalyell, now four years out of university, joined the Serbian Relief Fund that sent women doctors to the Eastern Front, and for the rest of the war she served as a pathologist in both Europe and North Africa. Meanwhile, the 24-year-old Woodcock stayed on the home front. She continued her career as a teacher in the New South Wales public school system and began university studies in arts and later economics: her experience of wartime stresses and strains and her perspective on the inequities of post-war society encouraged her to stand strong against inequality. For both Dalyell and Woodcock, university gave them new professional opportunities as modern career women. But at the same time, war experience profoundly shaped the trajectory of their opportunities, reconstituting these university-educated women as a rising economic, social and political force in 1920s and 1930s Australia.

The idea of "knowledge front" as deployed in this paper, helps us to scrutinise how women's careers were shaped by war and, conversely, how they helped shape Australia's post-war future. But for this idea to have most effect, it is vital to rethink our conceptions of war as having two distinct fronts that incorporated what Marilyn Lake and Joy Damousi (1995) call a "series of conceptual oppositions" (p. 3). The battle front is traditionally seen as the site of combat over an imaginary line that separated enemy forces. Casualty clearing stations where doctors and nurses worked were situated just behind the front line, and field hospitals, where Dalyell worked, were not far away. This was a largely masculinised domain yet every thud, whiz and explosion had the potential to physically or metaphorically shatter lives on the home front. By contrast, the home front, a term coined during the First World War to acknowledge the importance of national war work, was where war preparations were undertaken on an immense scale, a largely feminised domain safe from artillery and mortar fire.

The dichotomy served many purposes. The battle front distinguished soldiers as warriors and recognised their sacrifice as especially meaningful. The home front worked conceptually to recognise the significant war effort required to fuel the war machine, work that ranged from women volunteers knitting socks and baking Anzac biscuits to paid male and female workers manufacturing trench coats, bully beef and guns. The concept of "return", as Stephen Garton (1996) argues, situated soldiers within this feminised world to assume their pre-war roles as breadwinners and household heads, all of which began to sit uneasily with their new status as returned warriors (p. 20). The dichotomy also created a national state of mind in which the demands and requirements of returned soldiers were to be given priority over all else. Yet where did this leave returned service women? These women – nurses, doctors, VADs – had clearly negotiated a place on the front line, yet their return often left them at odds with a nation that appeared to ignore their contributions (Bassett, 1992, pp. 96-106; Garton, 1996, pp. 21-22). As Joan Scott (1987) reminds us, private-public distinctions like front line and home front help to weave "nationalist or patriotic ideologies" that justify loss for the survival of the nation, or subjugate women's needs to those of the state (p. 28). In neither case is there a substantive role for women outside the home.

The home front, Joan Beaumont (2014) argues, was an "essential part of the national experience of war" and "in dialogue with the battle front" to the extent that few Australians were "emotionally quarantined" (pp. xvi-xvii). The distinction between these two fronts is useful in one sense as it recognises both the soldier and civilian experience. But as Beaumont suggests, compartmentalising war in terms of what men did on the battle front and what women did on the home front conceals other

equally important and transformative war experiences that shaped the war and Australia's post-war future. There is a need to find a third domain that both accommodates women who served and views war and peace as a continuum with far-reaching effects for the nation-state.

By the 1920s, most Australians, whether they had served on the battle front or worked in the relative safety of the home front, had nonetheless suffered grievous loss. Many now lived and worked in situations where war had torn apart lives and injured the social and political fabric of public life in ways that endured during peacetime in the 1920s and the 1930s. Men who had served on battle fronts returned to Australia with justifiable claims to certain privileges, such as free medical treatment and job preference, yet war-serving women doctors such as Elsie Dalyell, were granted no such special status. And whereas women teachers like Lucy Woodcock remained in Australia during the war years, they nonetheless helped pick up the pieces of war-broken families both during the war and perhaps even more extensively, after it. The war both entrenched traditional gender stereotypes as well as disrupted them. War changed women's relationship to paid work in the professions, whether they served in the European or North African theatres of war or remained on the home front, with ripples of effect continuing into the 1920s and 1930s (Lake and Damousi, 1995, pp. 5-8). In November 1918, the guns may have stopped, but consequences continued for many years thereafter.

Examining women's involvement in war and its aftermath reveals the slipperiness between the "battle" and "home" fronts, between war and peace. This paper studies the lives of two university-educated career women who were marked by war as they moved into the peace of the 1920s. It considers how the university-cultivated expertise of each was largely shaped by war experience that pervaded the national consciousness both on the "front" and at "home". Each woman had her own distinctive experiences, but they both contributed in broader civic terms in ways that went beyond war and into the "peace" of the 1920s and 1930s. In many ways, their life's work championed what Marilyn Lake (1996) calls the "inviolable woman", the feminist goal for Australian women to be safe and to be strong, and thus a crucial and active part of the Australian polity (pp. 202-205).

The professional lives of these women also challenge the idea of war as having only two major fronts that ended on Armistice Day 1918. The careers of Dalyell and Woodcock each reveal a third space, the "knowledge front" that slipped and slid across the duality of home and battle fronts and across time, from war to the peace beyond war. The "knowledge front" was peopled not only by men but also by women. As crucial as it was to war – for example, in managing the control of deadly bacterial outbreaks – it also extended into the reality of post-war peace and into the need to resuscitate a war-battered society and reshape it into something more resilient. Despite the masculine dominance of war and the peace that followed, the "knowledge front" created room for women to take up the challenge.

Elsie Dalyell was a medical researcher and doctor who served on both the Middle-Eastern and European fronts of the Great War. Thereafter, she pursued a research career in Europe before returning to Australia in the 1920s to work in what might be termed public health, part of the great state intervention to nurse a damaged nation back to vigour and well-being. Lucy Woodcock was a teacher, headmistress, trade union official and feminist. Woodcock remained on the home front during the war, taking advantage of the renewed opening up of universities to women to pursue degrees in arts and economics, after which she continued to work as a teacher and

pursued new interests in social activism. In the lives of each we see a determination to use knowledge to strengthen the physical and material conditions of women's and children's lives, to make them "inviolable" and thus improve the prospects for peace. Dalyell's work in forging new knowledge of physical bodies would help combat war-caused disease, and Woodcock's quest for women's equal rights in work and pay would assist women to become self-supporting and independent, engaged citizens in the task of upholding democracy as a bastion against advancing fascism and war.

War and peace: the professional life of Elsie Dalyell

In 1923, Elsie Dalyell returned to live in Australia. She was an internationally renowned pathologist whose work had included furthering knowledge about typhus, gas gangrene and rickets. Her career trajectory is interesting for what it reveals about women's higher education, war, the medical profession and women's place as returned service personnel in Australia in the 1920s and 1930s. Born in 1881, Elsie Dalyell, the daughter of a mining engineer, one of the new professions of a late nineteenth century industrialising economy, was educated at Sydney Girls High School, a meritocratic state high school established in 1883 to advance girls' education on the same basis as boys' (Theobald, 1996, pp. 113-129). While a good proportion of Sydney Girls High School students tended to matriculate to Sydney University, Elsie instead joined the Department of Public Instruction in 1897 as a pupil teacher, and through this programme attended first year university subjects in arts and science. She worked for a few years as a teacher while continuing her university studies part-time. Then after a traumatic medical emergency in 1905 resulting in a hysterectomy, the causes of which are unclear, she resigned as a teacher and transferred to second year Medicine, where she graduated with glittering prizes (Mitchell, 1981).

Even as an undergraduate, her work in pathology was recognised by the university's professor of Pathology, David Welsh, who was one of three Scottish professors to "transplant the traditions of the Edinburgh school" to New South Wales, and who was instrumental in establishing an innovative pathology programme (Cossart, 1990). One of only 15 women undergraduates out of 388 in medicine in 1909, Elsie was appointed upon graduation in 1910 as resident medical officer at Royal Prince Alfred. This was a coveted position, which caused one newspaper reporter to remark that such an appointment should "make all women of the state very proud of what they are doing, and glad of the opportunities of future excellent work afforded them by their being elected to first class hospital appointments" (*Brisbane Courier*, 1910).

Welsh had also provided research opportunities to undergraduates which Dalyell pursued, including the opportunity to present a joint paper on cat-attacking parasites at the Australian Medical Congress that was later published as an academic article (Welsh *et al.*, 1910). Her diligence and intelligent approach to pathological research caught the eye of Welsh, who supported her successful application for the prestigious Beit Fellowship for medical research, recently established in Great Britain by the German-born British financier, Sir Otto Beit. The fellowship catapulted her into the complex pattern of networks of academic migration within the British Empire (Pietsch, 2013). She undertook a project on the bacteriological cause of summer diarrhoea in infants at the Lister Institute of Preventative Medicine in London from 1913 (Beit Memorial Fellowships, 2003, p. 20; Dalyell, 1915).

The Lister Institute of Preventive Medicine became an important point of connection for Elsie to the broader English and European network of women medical researchers.

The Lister Institute's director at the time was Charles Martin, who, though born and educated in England, had embarked on his academic career in Australia, first at the University of Sydney where he developed a strong collaborative professional relationship with James Wilson, professor of anatomy, and then as lecturer and acting professor of physiology at the University of Melbourne, before his appointment to the Lister Institute in 1903. Under Martin, the Lister Institute became a "magnet" for young Australian medical researchers, many of whom went on to distinguished careers in medical research, such as Howard Florey and Frank Macfarlane Burnet (Morison, 1986; Pietsch, 2013, pp. 110-111). While these networks mostly fostered the careers of men, the Lister Institute under Martin also nurtured the research careers of women scientists, providing them with well-equipped laboratories, and the financial and intellectual support to conduct their research and publish. Once they left the folds of the Institute, however, their research careers often floundered as they confronted what might be termed the pervasive intellectual masculinism – the "final barrier" – of university medical schools and scientific societies (Horne, 2015, pp. 77, 89-90). Yet women who continued their association with the Lister Institute, like biochemist and nutritionist Harriette Chick, often had successful research careers, the Institute providing a safe haven from the rough and tumble gender politics of other research or academic institutions (Chick *et al.*, 1971)[1].

Almost certainly as a consequence of her connection to the Lister Institute, after the declaration of war in 1914, Dalyell soon became part of women's networks committed to contributing expertise to the war effort. At the outset of conflict, women were prevented from enlisting as doctors in British military medical units. In 1914 Dr Elsie Inglis, a Scottish suffragette and member of the Scottish Women's Hospital Committee, tried to persuade the British government of the sense in utilising medical units staffed by women doctors on the Western Front. The British Government rejected the idea, but the French and Serbian governments accepted the offer of women's medical units. As a consequence, women formed private medical units often under the direction of British aristocratic women, such as Lady Wimborne (née Cornelia Spencer-Churchill), daughter of a British statesman and nobleman, and Lady Paget, wife of an English diplomat based in Serbia. In early 1915, Dalyell joined the Serbian Relief Fund where she worked as a pathologist in Lady Wimborne's unit in Skopje, Macedonia, alongside other British women's medical units such as that under the direction of the Scottish Women's Hospital (Mitchell, 1981).

Skopje had been annexed by Serbia during the 1912-1913 Balkan Wars, and was the site of many British and other foreign medical missions that arrived at the beginning of the First World War. Women doctors were welcomed on the Eastern Front and provided an important and often overlooked first defence against bacterial infections that in past conflicts (including the recent Balkan wars) had claimed more lives than gun shot. In fact, largely because of this medical work, the First World War was to become the first war to reverse this deadly trend. Bacterial infection amongst the troops was another war front, and one in which women doctors played an important role (Radovanovic, 2012, pp. 179-180). The Serbian situation provides an early example of the forging of a third domain by women utilising their extensive expertise for the war effort. It shows the importance of the knowledge front to the First World War.

Lady Wimborne's unit was established as a surgical outfit in anticipation of the war-wounded. On arrival in Serbia, however, its members discovered that Lady Paget's unit, the first British medical unit to be established in Serbia, had been severely weakened by an acute outbreak of typhus (*Magazine of the Women's College*, 1915,

1920). Typhus was transmitted by body lice as a consequence of the disruption caused by war that brought soldiers, refugees and others together in often unhygienic conditions, and had long been a killer of soldiers. Dalyell wrote to Professor Welsh in 1915: "Typhus was raging when we came out and I was speedily at work here"[2]. Their attentions turned to the problem of containing the outbreak. While Dalyell worked as a physician to cure the ill, she also worked as a medical researcher in her own laboratory provided by the Serbian Relief Fund to pursue scientific investigations. The makeshift laboratory was small and equipped only with what Dalyell had been able to bring with her from England. Nonetheless, to run her own laboratory was an unusual achievement for a woman and a rare if non-existent one in early twentieth century Australia: war could create opportunities like a woman-led laboratory not ordinarily granted on the home front. Dalyell's example shows how expertise and knowledge was brought into the folds of war to try to advance medical knowledge that would save lives.

Epidemic Typhus was generally a greater killer of soldiers than guns, and so developing a vaccine was imperative. When Hans Zinsser, the bacteriologist and then professor of medicine at Columbia University, arrived at Skopje with the American Sanitary Commission, Dalyell invited Zinsser, who did not have his own laboratory, to work in hers. She wrote to Welsh: "We worked amicably together in the quest of the organism of typhus", explaining how they sought to incubate the bacteria and produce a vaccine (see Footnote 2). Typhus vaccine success only came after the war, but measures were put in place to prevent the spread of the disease, such as new forms of hygiene to kill lice eggs lodged in clothing and bedding. The success of these missions was to reduce the spread of infection significantly (Drali *et al.*, 2014, p. 61). While modern warfare introduced new ways of killing soldiers, the lower death rates due to infectious diseases were almost certainly a consequence of this type of laboratory and clinical work performed in the field by both men and women doctors.

After six months in Serbia, Dalyell returned to the Lister Institute where, with Harriette Chick, she helped solve the problem of supplying large quantities of a prophylactic vaccine against the massive outbreaks of tetanus and typhoid fever (a different disease to epidemic typhus) amongst British troops[3] (*Magazine of the Women's College*, 1920, p. 11). She continued such field work in France, where she was attached to the women-staffed Scottish Woman's Hospital unit at Royaumont, which was close to the front line and which, in agreement with the French government, cared for French soldiers wounded in battle. Many of the patients had severe injuries caused by shrapnel that made them prone to soil-borne infections such as tetanus and gas gangrene. Both diseases were deadly without treatment and, even with treatment, were major bacteriological problems on the Western Front. There was great incentive to find an effective cure. Dividing her time between her patients and her makeshift laboratory, with colleagues from the Pasteur Institute in Paris, Dalyell sought to broaden knowledge about this bacteria. Her preliminary work in this area identified the potent bacteria and tested the effectiveness of experimental vaccines on guinea pigs, though the discovery of an immediate cure had to wait until the mass production of antibiotics in the Second World War. Yet her findings were deemed important enough to be published by the *British Medical Journal* (Dalyell, 1917; Post-Graduate Bulletin, 1958, p. 47).

In 1916 the British Army relaxed its enlistment restrictions on women doctors, and allowed them to become attached to the Royal Army Medical Corps, although without a commission and on lower pay than their male equivalents (Post-Graduate Bulletin, 1958, p. 47). From 1916 to 1919 Dalyell was attached to the RAMC as a bacteriologist,

serving in Malta, Greece and Turkey. Her war work, the combination of medical research and clinical practice to save lives, was recognised twice in dispatches, and in June 1919 she was awarded an OBE (Mitchell, 1981).

In 1919, utilising her connections at the Lister Institute, she began a three-year post as a senior clinician (effectively, second-in-charge) on a team led by Harriette Chick to study the relation between nutrition and childhood bone disease in post-war Vienna. Although the war had ended, the political, medical and social battles continued, and knowledge was now accepted as crucial to mend and strengthen war-damaged societies. In response to the widely reported crisis in war-torn Vienna of "hunger osteomalacia", whereby bones soften in a way that undermines a person's skeletal structure as happens in rickets, the Lister Institute funded a small project to investigate whether the newly reported effects of vitamin deficiency in animals also applied to humans. The animal studies had been conducted in Britain and the USA, but the war had effectively shut down scholarly communication of the results to scientific researchers behind the German lines. When Dalyell and Chick arrived in Vienna, they found the medical community ignorant of these British and American studies, and worse, continuing to treat clinically on the traditional belief that rickets was caused by a bacterial infection. According to Viennese doctors, rickets was a consequence of poor hygiene not poor nutrition. The study, then, became both a women-led mission to re-establish scholarly networks between formerly enemy nations, as well as to test new scientific theories on vitamin deficiency as a cause of disease in humans. A second study focused specifically on rickets and involved an expanded Lister Institute team, supported by the British Medical Association, working in children's hospitals alongside a team of Viennese medical researchers. The results convincingly showed the connection between diets poor in certain vitamins and minerals, and rickets. The study provided important clinical observations that were the basis of future explanations of how sunlight turns metabolised food into vitamin D, and was immensely significant for the future successful treatment of rickets worldwide (Chick *et al.*, 1971, pp. 154-160; Chick, 1976; Post-Graduate Bulletin, 1958, p. 48).

The Vienna work married Dalyell's pre-war interest in childhood diseases with her wartime experience of the consequences of war, in this case, malnutrition. But it was also apparent how, in a European city like Vienna, war and home fronts were not so easily separated: one collided with the other causing pain and disruption to soldiers and civilians alike. War-induced malnutrition entered domestic lives, causing far-reaching and long-term medical problems in the general population even as the Armistice was announced. Even in Australia, though far from the battlefields, war and home fronts could physically collide as emotionally traumatised or disease-infected men and women returned to Australia. As Dalyell discovered later in Australia, bacteria from the war zone, such as those causing syphilis and other sexually transmitted diseases, continued to cause havoc in the Australian population – often years later – and even within the supposedly safer confines of civilian life.

The rickets study achieved wide acclaim. Chick and Dalyell published articles about the Vienna studies in German and in the major English-speaking medical journals (Chick and Dalyell, 1919, 1920a, b; Dalyell and Chick, 1921; Chick *et al.*, 1922). Results from the study were also written up by Chick, Dalyell and others in a substantial document published by the British Medical Research Council. This provided the protocol for the future management of rickets and was the basis for future studies by other scientists. The study had broken down war-erected barriers to scholarly discussion and was important work of international significance.

Dalyell returned to Australia, after an extensive tour of the USA, lecturing to great acclaim on the Vienna research.

When she left Australia in 1913, Dalyell had been farewelled as a woman medical researcher on the cusp of a brilliant career. Ten years later, she returned with brilliant accolades, hoping to contribute to rebuilding a nation. She was 41 years old, a leader in her field with enviable research experience. However, her largely women-centred American and British academic networks were not immediately useful in the enclosed masculine halls of medical practice in Sydney, where she hoped to earn a lucrative living (McCarthy, 2003, pp. 266-267, 275-276; Pietsch, 2013, pp. 79-81). Her Macquarie Street practice failed and so in 1924, in order to earn a living, she became an assistant microbiologist in the Department of Public Health, conducting syphilis tests on returned soldiers. This was a course of events difficult to view as anything other than a waste of considerable talent. It shows the limited options for war-experienced women doctors in Australia compared to their male counterparts. The medical profession largely prospered from war-related medical advancements in fields like orthopaedics and plastic surgery. But Dalyell's situation shows the spoils were not for all.

Her connections to local women's networks did, however, allow her to extend her expertise in innovative if generally unpaid ways. While she conducted Wasserman tests for syphilis to earn a living, she volunteered her services to improving women's public health, most substantially in her involvement in a new venture: the Rachel Forster Hospital for women and children established in 1922 as a training hospital for female doctors. She was a committee member for ten years until 1935, and was instrumental in the opening of the Hospital's venereal diseases clinic to combat the wave of VDs in women, largely as a consequence of returned soldiers. The clinic sought to cure as well as to protect women from this war scourge. It implemented an innovative public health programme that ignored the social taboos of the disease in order to treat as many women as possible, and became a model for such clinics elsewhere in Australia and the world (McCarthy, 2003, pp. 272-280). Dalyell also became the honorary pathologist at Renwick Hospital for Infants in inner Sydney. The nature of her work there is unclear, but perhaps this role arose out of a connection between her pre- and post-war work on infants. Despite her well-received lecture tour to the USA, Dalyell rarely spoke in public in Australia, though she did conduct a course of lectures on women's health (including "hygiene" which may have been an oblique reference to contraception) to the students at the Women's College in the late 1920s. She also delivered at least one lecture on the rickets study. But her research career ceased on her return to Australia (Dalyell, unpublished).

Dalyell's career reveals her concern to mobilise medical expertise and knowledge for the protection of society. Initially, she sought to combat typhus and other communicable and bacterial diseases amongst the troops, then after the war, to investigate malnutrition as the cause of the childhood disease rickets. On return to post-war Australia, she utilised her knowledge of sexually transmitted diseases to help protect women in Australia from the ravages of VD. In some ways, she was still pursuing the battle against war-borne disease and despair that she had first encountered on the European and Middle-Eastern fronts of the First World War. Though the battle had moved to the home front, the quest for knowledge and the imperative to repair damaged populations remained as ardent as ever as expertise continued to be mobilised during the 1920s and 1930s.

War and peace: the professional life of Lucy Woodcock

While medicine was one route for the engaged university-educated woman citizen in the early twentieth century, teaching was another. The work of Lucy Woodcock, teacher, trade union leader, pacifist and feminist, offers an equally rich example of women graduates using their expertise to shape the Australian nation. Her story shows how war cast a long, dark shadow over the 1920s and 1930s, motivating women like Woodcock to actively seek to improve Australian society and to strive for peace. Whereas Dalyell's research clearly sought to advance knowledge based on specialised medical research expertise and her frontline experience, Woodcock's activism grew out of her wartime university studies and experience as a woman teacher on the home front, including her own personal grief at the death of her soldier brother. An examination of her professional life shows how the opportunity of increased access for women to study at university during the war equipped her with the authority of two degrees and the confidence to lead. Thus, from the early 1920s Woodcock had leadership positions in community affairs, and from the beginning of the 1930s she led public debates about women's equal rights and, subsequently, the need for school reform. The war framed this activity by creating a situation where the successes of early Australian feminists were under threat in the new era of the soldier citizen and by prompting people like Woodcock to remake a shell-shocked society resilient to future international conflict.

Like Dalyell, her story, too, began before the war in a time when Australian feminists had made headway in the battle for equality, helping to smooth the way for young women like Woodcock to pursue a professional career. In 1906, Woodcock began her training as a pupil teacher and became a qualified primary teacher in 1910, maintaining a career in teaching until she retired in 1953. Her family circumstances were modest; her father's wage as a railway surveyor barely supported a large family. Of working class origins, she was born in Sydney's western suburbs, the eldest of eight children, and attended the local Granville Superior School, which, unlike Dalyell's Sydney Girls High, was not a traditional conduit to university education. Yet in 1914 she took a brave step to expand her knowledge and broaden her expertise. She went to university (Mitchell, 1990).

Whereas Dalyell benefitted from NSW Department of Instruction funding of university studies for primary teachers, Woodcock did not. In the reorganisation of teacher training in 1912, teachers' scholarships for university study were now only offered for high school teacher training. So, at her own expense, Woodcock enroled as an unmatriculated, evening student in arts and then, in 1920, enroled in economics, demonstrating an ambition not unheard of in women teachers to equip themselves with credentials in order to advance their careers within a masculine hierarchy (Kyle, 1986, pp. 142-246). Through special procedures that counted the successful completion of university subjects towards matriculation and a degree, she matriculated in 1919, and was awarded a BA in 1922 and a BEc in 1924 (Mitchell, 1990). Evening lectures were introduced in 1884 to expand educational franchise and bring university degrees to a broader public, and it is clear that Woodcock was a beneficiary of this programme (Turney *et al.*, 1991, pp. 188-193; Horne and Sherington, 2012, pp. 62-63).

Throughout her university studies, Woodcock continued to teach. By day she was Miss Woodcock, 2nd Assistant primary teacher at Lidcombe Public School; by night, she was Miss Woodcock, an evening undergraduate student studying for a BA. She was an undergraduate during the First World War, her part-time studies extending into the early post-war period, just at the moment when greatly increased numbers of

women students transformed the Faculty of Arts from what had been a co-educational institution on paper to one in reality (Horne, 2015, pp. 89-92). The increased numbers of women undergraduates during the First World War established what British education historian Carol Dyhouse (1995) describes as a critical mass that nurtured feminine confidence to participate in university life and to establish networks of influence and authority. It was an environment in which Woodcock thrived (pp. 74-90).

Crucially, while at university she came under the intellectual influence of Robert Irvine's faculty of Economics[4]. Irvine was the first professor of Economics at the University of Sydney who wrote, controversially, on the role of business, wages and monetary policy, adopting a syndicalist view on the organisation of labour and industry. Irvine, like other professors of the time, cultivated talent in committed and interested students, introducing them to the ways of spirited intellectual debate and lively conversation, a milieu very different from the environment in which Woodcock grew up. Irvine was also committed to the idea of evening lectures, seeing them as a way to extend educational franchise to a broader population, and he nurtured his evening students who were often the first of their families to attend university. With radical views on the connections between labour and business, he scorned orthodox economists for their lack of imagination and could not abide a narrow economics approach that only scrutinised monetary policy without broadening inquiry into society more generally. He believed the study of economics deepened an understanding of society's ills, captured in the evocative titles of his books including *The Veil of Money* (1916) and *The Roots of Our Discontent* (1922), and this is how he structured the economics curriculum (McFarlane, 1966, pp. 4-18).

The academic environment of Irvine's economics department probably influenced Woodcock's view on labour in a capitalist economy, first as an intellectual exercise within the confines of undergraduate study, then later arming her with the authority to speak with confidence on the matter: salaries and wages should reflect a fair value of labour rather than solely be the sum of what employers were willing to pay. The experience in Irvine's course may also have helped politicise Woodcock as she became a unionist soon after graduating and a close observer of wage equity. With profits high during the war (and immediately after) and a scarcity of male labour, the time was ripe for reasonable wage rates for both men and women. When Woodcock graduated, her pay was raised to recognise that a degree added value to her employment as a teacher. Even so, her pay was still less than that of men of comparable experience, an inequity that in all likelihood consolidated her growing feminist perception of the unjustified inferior status of women in the workplace. The favourable conditions of home-front employment, the increased numbers of women in the professional workforce, yet the reality of a female rate of pay, all played on the mind of Lucy Woodcock in the period between 1914 and 1924 as she negotiated transitions between life as a teacher and life as a university student, and as she began to form intellectual positions on the value of labour, including the idea of equal pay for women (Mitchell, 1990).

As an educator, Woodcock believed education was empowering. Her vision for a peaceful and resilient Australia was of enlightened youth educated in reinvigorated state schools and supported by informed families, perhaps reinforcing the ideals and hopes of this wartime generation. Her university education equipped her to critically assess social justice, and from this viewpoint she sought to understand the inequities that had emerged from war, to find creative solutions and to persuade an often reluctant government and broader public to take a more humane path. Woodcock confronted the legacy of war with a programme for peace and the pursuit of equal

working rights, and challenged the ideology of the "soldier citizen" – returned white, male soldiers deserving of social, economic and political reward over women and others (Garton, 1996, pp. 52-54). The conjuncture of war and Woodcock's pursuit of university studies shaped her professional view on what was wrong with Australian society and how to improve it.

In 1924, as an evening student, her civic work and leadership ability was already in evidence. At a mass meeting of evening students in the Great Hall, Woodcock was appointed joint honorary secretary of a committee to advise on and raise money for the university's war memorial (*Sydney Morning Herald*, 1924). At one fund-raising dance, resplendent in a "draped frock of rose mousseline, shot with old gold", she presided over a room decorated with wisteria, palms and coloured streamers and awhirl with frocks of black diamante, brocaded taffeta, sequins and crepe that in some ways belied her lowly social origins and her sympathies with the labour movement (*Evening News*, 1924). The dance was reported in the social pages to help raise the profile of the university's campaign for the commemoration of men and women who had served in the First World War and died. These and other events organised by the committee raised enough funds to donate a large, individual bell to the university's war memorial carillon in honour of evening students who had died. This activism also reveals how the idea of supporting the troops in memoriam lingered in the public consciousness regardless of political affiliation or sympathy long after peace was declared, the despair of war now entrenched on the home front. Few could escape its clutches even at a fancy ball.

The graceful public face of a fund-raising event hid the deeper hurt of a society coming to terms with war loss (Inglis and Brazier, 1998, pp. 97-106; Winter, 1995, pp. 78-116). For Woodcock, the connection was personal. Her eldest brother, Thomas, four years her junior, a gunner in the 4th Australian Field Artillery Brigade, died in battle in Belgium in the last months of the war. The Australian Archives have letters written by Woodcock on behalf of her parents expressing the keen loss of a beloved son and brother that sought to untangle the bureaucracy surrounding death on the battle field (Woodcock, 1914-1920). She had personal experience of war loss and believed in the proper memorialisation of those who died, showing respect for the war, the war dead and the returned. In these acts of civil obedience to the memory of the war and its dead, she demonstrated a belief in civic duty in which citizens proactively worked towards mending and sustaining the social fabric of civility. Her pacifism was born out of such human loss.

By the mid-1920s, Woodcock's sense of civic responsibility had evolved to incorporate not only the quest to restore social equilibrium, but also a commitment to reform social inequalities. She sought not just to mend the social fabric, but also to improve it. Woodcock sustained a commitment to civil obedience throughout her activist career, believing in the power of speech, the persuasive force of a large public meeting and the potency of the written word.

Her brand of syndicalist radicalism also soon came to be shaped by a "post-suffrage international feminism" that was inspired by Australia's then leading feminist, Bessie Rischbieth, and criticised the inequities faced by women in both national and international arenas arising out of the persistently stubborn organisation of labour around masculine priorities. In her work as union official, Woodcock campaigned for the rights of both male and female teachers, but her particular sympathies lay with women, who had lesser employment rights than their male colleagues, yet, as she argued, often had just as great a need for a secure and equitable salary. She saw women's rights in socio-economic terms, where equal rights in employment would help the economy to prosper and advantage the many, not just the few.

She joined the NSW Teachers' Federation in 1918 and became a member of its executive from 1924 to 1953, with a break between 1927 and 1934. Between 1927 and 1929 she was on a teacher exchange in London, and on her return to Australia in 1930, became headmistress first at Grafton, a rural school in northern New South Wales, then in 1933 in inner Sydney, where she was headmistress for twenty years at Erskineville Public School until her retirement in 1953. She resumed her executive position in the Teachers' Federation in 1934, when she became its long-serving senior vice-president (1934-1953) (Mitchell, 1990; Gardner, 1985, p. 237).

Woodcock was a member of the Federation's feminist faction and became specifically aligned with the campaign for equal pay for women led by feminists Muriel Heagney and Jessie Street (Gardner, 1985, p. 244). Her relationship with Jessie Street is particularly interesting. Street was the president of the United Associations, a network of feminist organisations. She was also a University of Sydney graduate, the same age as Woodcock, yet had graduated a full eleven years before Woodcock. Street had matriculated through private study and studied at university full-time rather than Woodcock's more arduous route of full-time employment and part-time study. Despite their very different social origins – Street was the daughter of a senior official in the Indian civil service and pastoralist – they formed both an effective working partnership over the question of equal pay for women and a lifelong association (Radi, 2002).

During the depression, the education department reduced teachers' salaries, which Woodcock campaigned to have restored. At the same time, she took on the battle to ditch the notorious Married Women (Lecturers and Teachers) Act, legislated in 1932 (and not repealed until 1947) which she saw as an assault on women's full citizenship rights that made it legal for the Education Department to terminate the full employment rights of women teachers upon marriage (Mitchell, 1969, pp. 71-79, 1990; Gardner, 1985, pp. 365-374). From 1931 she began to deliver her message about women's rights to equal pay and adopted Street's own preferred activist tactics of public appeals, which she used throughout her activist career. She spoke at protest meetings and conferences, delivered lectures, wrote letters to newspaper editors, spoke on radio and led deputations to ministers. The feminist alliance between Federation members like Woodcock and groups such as the National Council of Women and Jessie Street's United Association of Women opened out public discussion on the matter in ways not possible within the federation itself. The feminist organisations created a space for Federation campaigners – all women – to fight the issue in public (Theobald and Dwyer, 1999, pp. 62-64).

The demands for the right of all women, married or not, to have the same work conditions and pay as men were at the heart of the feminist project to make women self-supporting and closer to being "inviolable". Woodcock explained at a protest meeting in 1932 a matter that she later took up in a deputation of five women teachers to meet with the minister of education: women, too, often had onerous financial responsibilities. Many kept house, sometimes simply for themselves, but often for various permutations of an extended family, perhaps an elderly widowed mother, or orphaned nieces and nephews, or other family members who for one reason or another, especially including war injury and emotional breakdown, could not gain paid employment (*Daily Examiner*, 1932; Theobald and Dwyer, 1999, pp. 69-71). This was Woodcock as social economist, seeing macro-economics as firmly based in the economy of "home" as much as it was in the economy of government or of business. She also knew that the economic burden of returned soldiers often fell on women.

By the 1930s, Woodcock's reform agenda had settled into the cultivating role inspired by her calling as a teacher. Whereas agitation for equal rights for women teachers was a

question of social justice that would be of incalculable benefit to women, Woodcock believed a reformed focus on nurturing children rather than instilling them with competitive values carried the hope for peace. At an international peace conference held in Australia in 1938, she argued that "[i]f we wish to bring about permanent friendship and peace among nations we must begin with the child of today". According to Woodcock, central to this child-centric approach were both mothers and schools. Whereas schools were seen to have the potential to plant the humanitarian seed in children, mothers were the ones who would support its growth to maturity, a role, according to Woodcock, that not all were suited to: "A school for mothers is long delayed in the State of New South Wales. Teachers are daily correcting misconceptions passed on by the mothers to the children" (*Sydney Morning Herald*, 1938a). Blaming the mother hardly seemed to be the refrain of a sympathetic feminist. Yet Woodcock also believed that schools were often at fault by supporting a system of education that "bred the competitive spirit and love of power" which she saw as a destroyer of peace. In the context of 1930s fascism, of Franco's Spain, Hitler's Germany and Mussolini's Italy, "competitive spirit" and "love of power" were values from an earlier era, one in which many teachers themselves had grown up. They were especially frightening to a generation of war-weary men and women who did not want to slip into war again. "The weakness", Woodcock explained, "lies in the way we educate children" (*Sydney Morning Herald*, 1938a).

For citizens like Woodcock, whose feminist consciousness was raised in the context of democratic rights like the granting of female suffrage, the ideal of democracy (if a radicalised one) had by the 1930s become a bastion for many feminists against the advance of fascism. In a modern, progressive Australia, Woodcock argued in 1938 at an educational conference in Newcastle (New South Wales), the school curriculum needed drastic changes in order to equip children to become "socially useful" citizens who would uphold democracy and "remould and rebuild society so that war and poverty would be abolished" and the civilising potential of democracy upheld (*Maitland Daily Mercury*, 1938). Much of this discussion came out of interest in progressive education as articulated by the New Education Fellowship. Woodcock was president of the local group of this international movement in the late 1930s. As she wrote in 1940, the ideal was "the full and harmonious development of [a child's] whole personality" to help them to become responsible members of the community (Woodcock, 1940). This was, as Craig Campbell and Helen Proctor (2014) have termed, "New Education-style progressivism", an education that equipped pupils with a sense of reformist and enlightened concern towards the greater polity (pp. 161-163).

In addition to the need for curriculum reform was also the practical problem of the physical decay of school infrastructure. For Woodcock, attractive playgrounds and better school rooms would assist the child to "grow up to become a citizen bearing a fruitful part in the life of the community" (*Macleay Chronicle*, 1940). Rather than school rooms painted in "dull, hard battleship grey", or "an ugly green", Woodcock proposed the need for "beauty, dignity, graciousness and utility" in school buildings. Rooms should be warm in winter and cool in summer, they should be decorated in attractive colours and adorned with pieces of pottery and pictures, beautified by gardens, in order to inspire a child's potential, and they should have sufficient numbers of teachers to support children in their endeavours. The physical environment should nurture the child rather than have the child battle the elements (*Sydney Morning Herald*, 1938b). And the state should support teachers in their work by providing the best possible employment conditions in terms of salary, gender equity, regulation and physical work conditions. Only then, she believed, could teachers properly perform their duty as civic

leaders: "We, as teachers, must see ahead and lead. It is our rightful place to lead, and not to follow" (*Macleay Chronicle*, 1940). At the heart of democracy stood an enlightened teacher and her knowledge-inspired pupil inside a welcoming, modern classroom.

Conclusion

At the advent of the Second World War, Elsie Dalyell, a woman now in her late 50s, enlisted with the Red Cross Blood Transfusion Service, where she served until the end of the war. She retired soon after, probably as a consequence of a heart condition, and died in 1948 aged 66 years. Her career spanned five decades as teacher, medical researcher, clinician, and on return to Australia, as a public health advocate and practitioner. Lucy Woodcock continued her career as headmistress and Federation senior vice-president until she retired from the Education Department in 1953, aged 64 years. In retirement, she focused her activist energies on Cold War pacifism and was part of various international delegations with Jessie Street in the 1950s. She became president of the United Associations of Women in 1957 until her death in 1968, a week after her 79th birthday.

Neither woman married. Both were financially independent, pursuing their chosen careers enriched and enabled by university expertise and shaped by their distinctive experiences of war, one on the Eastern and Western Fronts, the other on the home front. Yet the lives of both women show that the fronts of "war" and "home" were not as rigid as is often supposed, but slid into one another, shaping the actions of women citizens intent upon repairing the damage wrought by war as well as formulating a new type of peace. Both women's professional lives also enable us to see how the "knowledge front" of war opened up opportunities to women in the war and beyond, thus going some way to collapse the divide created by Armistice Day between the formal end of the war and the years that followed. Even on Dalyell's return to Australia, where she was unable to succeed in private practice, she still had opportunities (if not lucrative ones) in buttressing the health of the nation against disease, including that of its women and children. The nation-state provided for returned soldiers and their families and paid Dalyell to use her expertise and knowledge of war-borne bacteria to do her job in the Department of Health. Dalyell and other women doctors, often in a voluntary capacity, looked after the medical well-being of women and children, whether or not they were from returned soldier families, devising educational and medical strategies such as her VD clinic and lectures on "feminine hygiene" to help heal a medically and socially fractured. For Woodcock, radical feminism and what she saw as its enlightened wisdom were central to her political being. She involved herself actively with women's rights, seeing such as fundamental to full citizenship which itself was a buttress to a socially weakened society. In her worldview, women were crucial, either as teachers or well-informed mothers, the "maternal citizens" who would shepherd the next generation as defenders of democracy and peace.

Expertise was at the heart of both women's careers, conspicuously in the research and medical career of Dalyell. For Woodcock, her expertise was modelled on the ideals of education, feminism and an equitably-shaped economy. Such ideals inspired her activism to remember the war dead while also to transform a national psyche that venerated returned soldiers as warriors into one that also cherished peace. The knowledge front provides space to examine the professional lives of women experts during war and peace. It also usefully moves away from the dichotomy of war and home fronts, to open up the terrain of war and peace as a single continuum rather than a duel of opposites. Again, there is space to examine the lives of university-educated women, especially the ways in which war and expertise shaped their responses to rebuilding the nation in the 1920s and 1930s. "There is" Woodcock said,

"most important social work for us to do if we are to endure and live as a Democracy" (*Macleay Chronicle*, 1940). Both had endured war and matured as a consequence: they saw how unwell the post-war nation was, and sought to heal the wounds.

Notes

1. Chick does not address the gender issue directly, but her co-authored book does contain references to a number of women researchers and their work during Martin's directorship. The appendices, too, show that women were a significant minority of researchers in the 1910s-1930s.
2. E.J. Dalyell to D. Welsh, Correspondence, 31 May 1915, available at: http://beyond1914.sydney.edu.au/profile/2736/elsie-jean-dalyell (accessed 20 October 2015).
3. This work arose out of Charles Martin's development of vaccines to attack two new strains of typhoid. During the war, Martin was also a pathologist in the Australian Army Medical Corps on Lemnos where he discovered the two new strains. He directed Chick and Dalyell to crack the puzzle of supplying large quantities of the new vaccines, which he could reproduce in the field only in small quantities (Morison, 1986).
4. University of Sydney Calendars for 1921 (p. 195-96, p. 521), 1922 (pp. 213, 545, 547, 677).

References

Bassett, J. (1992), *Guns and Brooches: Australian Army Nursing from the Boer War to the Gulf War*, Oxford University Press, Melbourne.

Beaumont, J. (2014), *Broken War: Australians in the Great War*, Allen & Unwin, Sydney.

Beit Memorial Fellowships for Medical Research (2003), "Beit Memorial Fellowship", Oxford, available at: http://wellcomelibrary.org/item/b21321243#?c=0&m=0&s=0&cv=2&z=-0.458%2C0.005%2C1.8777%2C1.4031 (accessed 16 August 2015).

Brisbane Courier (1910), "Ours sisters and our cousins", 9 February, p. 13.

Campbell, C. and Proctor, H. (2014), *A History of Australian Schooling*, Allen & Unwin, Sydney.

Chick, H. (1976), "Study of Ricketts in Vienna 1919-12", *Medical History*, Vol. 20 No. 1, pp. 41-51.

Chick, H. and Dalyell, E. (1919), "The danger of scurvy in Vienna", *Wiener Klinische Wochenschrift*, Vol. 32 No. 51, pp. 1219-1220.

Chick, H. and Dalyell, E. (1920a), "The influence of overcooking vegetables in causing scurvy among children", *British Medical Journal*, Vol. 1 No. 3119, pp. 546-548.

Chick, H. and Dalyell, E. (1920b), "The prevention of Scurvy", *Mitteilungen des Volksgesundheitsamts*, No. 1, pp. 16-17.

Chick, H., Hume, V. and Macfarlane, M. (1971), *War on Disease: A History of the Lister Institute*, Deutsch, London.

Chick, H., Dalyell, E., Hume, M., Mackay, H., Smith, H. and Wimberger, H. (1922), "The aetiology of rickets in infants: prophylactic and curative observations at the vienna university kinderklinik", *Lancet*, Vol. 2, pp. 7-11.

Cossart, Y. (1990), "Welsh, David Arthur (1865-1948)", in Ritchie, J. (Ed.), *Australian Dictionary of Biography*, Vol. 12, Melbourne University Press, Melbourne, pp. 441-442.

Daily Examiner (1932), "Dismissals – married women teachers – meeting of protest – 'blow at status of women workers' ", 29 August, p. 5.

Dalyell, E.J. (unpublished), "Women's College Roll", No. 102, Women's College Archives, The University of Sydney, available at: http://beyond1914.sydney.edu.au/profile/2736/elsie-jean-dalyell (accessed 20 October 2015).

Dalyell, E. (1915), "Obligate anaerobes in the alimentary tract of infants", *Journal of Pathology and Bacteriology*, Vol. 19, pp. 276-285.

Dalyell, E. (1917), "A case of gas gangrene associated with B. oedematiens", *British Medical Journal*, Vol. 1 No. 2933, pp. 361-362.

Dalyell, E.J. and Chick, H. (1921), "Hunger osteomalacia in Vienna, 1920: I – its relation to diet", *Lancet*, Vol. 2, pp. 842-849.

Drali, R., Brouqui, P. and Raoult, D. (2014), "Typhus in World War 1", *Microbiology Today*, Vol. 41 No. 2, pp. 58-61.

Dyhouse, C. (1995), *No Distinction of Sex? British Universities 1870-1939*, University College London Press, London.

Evening News (1924), "Reunion dance: 'Varsity students'", 30 September, p. 11.

Gardner, M. (1985), "Women workers, trade union government and strategies: The New South Wales nurses 'Associates and Teachers' Federation", PhD, University of Sydney, Sydney.

Garton, S. (1996), *The Cost of War: Australians Return*, Oxford University Press, Melbourne.

Horne, J. (2015), "The final barrier? Australian women and the nineteenth-century public university", in Panayotidis, E. and Stortz, P. (Eds), *Women in Higher Education, 1850-1970: International Perspectives*, Routledge, New York, NY and London, pp. 76-96.

Horne, J. and Sherington, G. (2012), *Sydney, The Making of a Public University*, The Miegunyah Press, Melbourne.

Inglis, K.S. and Brazier, J. (1998), *Sacred Places: War Memorials in the Australian Landscape*, The Miegunyah Press, Carlton.

Kyle, N. (1986), *Her Natural Destiny: The Education of Women in New South Wales*, New South Wales University Press, Kensington NSW.

Lake, M. and Damousi, J. (1995), "Warfare, history and gender", in Damousi, J. and Lake, M. (Eds), *Gender and War: Australians at War in the Twentieth Century*, Cambridge University Press, Melbourne, pp. 1-17.

Lake, M. (1996), "The inviolable woman: feminist conceptions of citizenship in australia 1900-45", *Gender and History*, Vol. 8 No. 2, pp. 197-211.

McCarthy, L. (2003), "Idealists or pragmatists? Progressives and separatists among australian medical women, 1900-1940", *Social History of Medicine*, Vol. 16 No. 2, pp. 263-282.

McFarlane, B. (1966), *Professor Irvine's Economics in Australian Labour History, 1913-1933*, Australian Society for the Study of Labour History, Canberra.

Macleay Chronicle (1940), "Miss Woodcock Talks", 16 October, p. 2.

Magazine of the Women's College (1915), "Extracts from a Serbia letter by Dr Dalyell", November, pp. 37-41.

Magazine of the Women's College (1920), "Dr Dalyell", *Magazine of the Women's College*, Vol. 7, pp. 10-13.

Maitland Daily Mercury (1938), "Education – changes in curriculum – many suggestions", 1 October, p. 2.

Mitchell, A. (1981), "Dalyell, Elsie Jean (1881-1948)", in Nairn, B. and Serle, G. (Eds), *Australian Dictionary of Biography*, Vol. 8, Melbourne University Press, Melbourne, pp. 201-202.

Mitchell, B. (1969), "The NSW teachers' federation", *Labour History*, No. 17, pp. 67-79.

Mitchell, B. (1990), "Woodcock, Lucy Godiva (1889-1968)", in Ritchie, J. (Ed.), *Australian Dictionary of Biography*, Vol. 12, Melbourne University Press, Melbourne, p. 559.

Morison, P. (1986), "Martin, Sir Charles James (1866-1955)", in Nairn, B. and Serle, G. (Eds), *Australian Dictionary of Biography*, Vol. 10, Melbourne University Press, Melbourne, pp. 423-425.

Pietsch, T. (2013), *Empire of scholars: Universities, Networks and the British Academic World 1850-1939*, Manchester University Press, Manchester and New York, NY.

Post-Graduate Bulletin (1958), "Some pioneering women of the University", *Magazine of the Women's College*, May, pp. 45-47.

Radi, H. (2002), "Street, Jessie Mary (1889-1970)", in Ritchie, J. and Langmore, D. (Eds), *Australian Dictionary of Biography*, Vol. 16, Melbourne University Press, Melbourne, pp. 328-331.

Radovanovic, M. (2012), "British medical missions in Serbia 1914-15", *London Philatelist*, Vol. 121 No. 1396, pp. 179-186.

Scott, J.W. (1987), "Rewriting history", in Higonnet, M.R. *et al.* (Eds), *Behind the Lines: Gender and the Two World Wars*, Yale University Press, Yale, New Haven, CT and London, pp. 21-30.

Sydney Morning Herald (1924), "University Carillon – evening students to give a bell", 12 May, p. 8.

Sydney Morning Herald (1938a), "Train children in ways of peace – schools for mothers wanted", 8 April, p. 4.

Sydney Morning Herald (1938b), "Ugly NSW schools – beauty and dignity needed", 28 June, p. 11.

Theobald, M. (1996), *Knowing Women: Origins of Women's Education in Nineteenth-Century Australia*, Cambridge University Press, Melbourne.

Theobald, M. and Dwyer, D. (1999), "An episode in feminist politics: the Married Women (Lecturers and Teachers) Act, 1932-47", *Labour History*, No. 76, pp. 59-77.

Turney, C., Chippendale, P. and Bygott, U. (1991), *Australia's First: A History of the University of Sydney 1850-1939*, Vol. 1, Hale & Iremonger, Sydney.

Welsh, D., Dalyell, E. and Burfitt, M. (1910), "Haemogregarina dasyure: a haemogregarine of the Australian native cat", *Journal of Pathology and Bacteriology*, Vol. 14, pp. 542-546.

Winter, J.M. (1995), *Sites of Memory, Sites of Mourning: The Great War in European Cultural History*, Cambridge University, Cambridge.

Woodcock, L. (1940), "Letter to the editor", *Sydney Morning Herald*, 29 July, p. 10.

Woodcock, T. (1914-1920), "Papers of Thomas Woodcock", NAA B2455, National Archives of Australia, Canberra, available at: http://recordsearch.naa.gov.au/SearchNRetrieve/Interface/ViewImage.aspx?B=8860079 (accessed 8 December 2015).

Further reading

Anderson, D. and Vervoorn, A. (1983), *Access to Privilege: Patterns of Participation in Australian Post-Secondary Education*, ANU Press, Canberra.

McFarlane, B. J. (1983), "Irvine, Robert Francis (1861-1941)", in Nairn, B. and Serle, G. (Eds), *Australian Dictionary of Biography*, Vol. 9, Melbourne University Press, Melbourne, pp. 438-39.

Welsh, D. and Dalyell, E. (1910), "Haemogregarina peramelis: a free haemogregarine of an Australian bandicoot", *Journal of Pathology and Bacteriology*, Vol. 14, pp. 547-49.

Whitehead, K. (2003), *The New Women Come Along: Transforming Teaching in the Nineteenth Century*, Australian and New Zealand History of Education Society, Sydney.

Corresponding author

Julia Horne can be contacted at: julia.horne@sydney.edu.au