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CAMBRIDGE WOMEN AND THE PROFESSIONAL WORLD: NAVIGATING GENDER CONSERVATISM IN THE LATE VICTORIAN ERA

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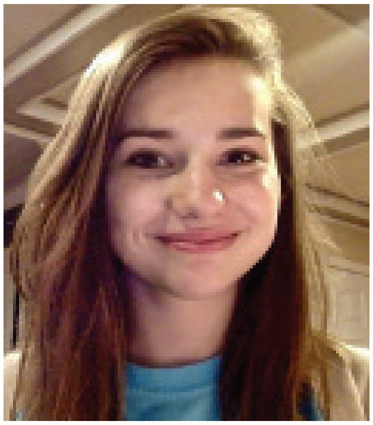
Abstract

During the late nineteenth century, British women received better education, especially at the university level. In particular, the University of Cambridge opened two women's colleges, Girton College in 1869 and Newnham College in 1871. The establishment of higher educational institutions greatly contrasted the traditions of the Victorian gender norms, which dictated that women should be feminine, nurturing, and supportive towards their husband and family. Due to this persistence of tradition, these conservative notions of gender influenced Cambridge women throughout their academic and professional lives. Although women may have been limited by gender conservatism in their careers, it is important to note that these limitations did not make their accomplishments less impressive. Furthermore, their strategic navigation of traditional gender roles aided them in successfully establishing their professional presence in their respective fields. Women



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Olivia Dobbs is currently a senior at the University of North Carolina at Charlotte. Her majors are History and Japanese with a minor in mathematics. Having been chosen to participate in the Early Entry program for the History M.A. with a concentration in Public History, she wishes to continue her research on women's history in the 19th and 20th centuries and hopes to further integrate her Japanese skills in her career. She expects to pursue a Ph.D. later in her career. She is currently awaiting publication for her biographical entry on Philippa Fawcett in The Palgrave Encyclopedia for Victorian Women's Writing. The entry details the impressive life of Fawcett, the first woman in Cambridge history to earn higher than a man on the mathematics tripos, and her dedication to education throughout her career in civil service.

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Dr. Amanda Pipkin is Associate Professor of History at the University of North Carolina at Charlotte. She received a bachelor's degree from Wake Forest University, an M.A. at the University of Leiden, and a Ph.D. from Rutgers University, the State University of New Jersey. Her book, Rape in the Republic, 1609-1725: Formulating Dutch Identity (Brill, 2013), reveals the significance of sex and gender in the construction of Dutch identity during the period of the Revolt of the Netherlands and beyond by examining depictions of rape in pamphlets, plays, poems, and advice manuals. She co-edited with Sarah Moran Women and Gender in the Early Modern Low Countries, 1500-1750 (Brill, 2019), an interdisciplinary volume available in Open Access that reveals vital interconnections among women across the modern political divide of The Netherlands and Belgium. She has also published articles on seventeenth-century Dutch culture in the Journal of Early Modern History and in Tijdschrijft voor Geschiedenis. Her new book-length project, Dissenting Daughters: Reformed Women in the Dutch Republic, 1572-1725, highlights women's contributions to the spread of the Reformed faith across Europe by detailing their teachings, efforts to convert unbelievers, organization of informal church services, participation in international debate, and encouragement of their fellow Calvinists abroad.

such as Jane Ellen Harrison, Charlotte Angas Scott, Marion Greenwood Bidder, and Philippa Fawcett used various tactics to establish themselves as academics and help inspire other women in the process. Though exceptional in their upbringing and talents, other Cambridge women commonly practiced their methods of navigating gender conservatism and other social dilemmas. By skillfully conforming to certain gender norms, these women helped revolutionize women's professional opportunities from within and ushered in the next generation of female academics.

Keywords: feminism, gender, nineteenth century, twentieth century, University of Cambridge, university education, Victorian era, women's history

Introduction

> Tradition is also responsible for no thought being given by the parents of the future of their girls. No friends dream of asking the mother of her girl as they would of her boy, "What is she going to do?" (Jopling, 1903, pp. 119)

In the late Victorian Era, middle-class women entered the workforce in increasing numbers. As the above quote from 1903 from Louise Jopling's essay on women's careers demonstrates, the long-standing tradition of women's domesticity lingered, oftentimes affecting their ability to establish themselves in the professional sphere. Nonetheless, women learned to navigate traditional gender norms and find success in their careers. One major contributing factor to women's increasing professional opportunities includes the movement for women's higher education, which saw significant victories in the latter half of the nineteenth century. In particular, the University of Cambridge opened two women's colleges. Emily Davies founded Girton College in 1869, while Henry Sidgwick opened Newnham in 1871. These colleges gave women of the white middle class the opportunity to cultivate their intellectual interests in an academic environment. Cambridge did not recognize women as full students, a direct result of traditional Victorian gender norms, which dictated that women did not share the same intellectual capabilities as men and should thus remain in the domestic sphere (Gould, 1997, pp. 127). Other historians have approached the subject of gender conservatism within Cambridge by focusing on the student experience. I will instead examine the lives of four Cambridge women in terms of their navigation of gender norms as both students and professionals, focusing my efforts on four pioneering women. Although these women had unique lives and circumstances, their experiences echo the many strategies Victorian women had to employ to establish themselves in their careers. I will argue through their strategic navigation of gender conservatism, these women could justify their presence within the masculine Cambridge community and inspire the next generation of female academics.

Jane Ellen Harrison

Jane Ellen Harrison and her career in Greek studies shows how women could outright rebel against Victorian ideals of womanhood and still become an influential member of the women's higher education movement. Her experiences demonstrate a more radical way of approaching gender norms, especially regarding behavior and appearance. She used her rebellious nature to cement herself as an academic and help the next generation of female students at Cambridge an unorthodox role model.

Harrison's student life echoed the sentiments of Victorian womanhood, although she fiercely objected to such ideals. From a young age, Harrison developed a disdain for domestic life. In one anecdote from her work *Alpha and Omega,* she remembered how her aunt reminded her of the powerful nature of gender roles, in which the aunt simply stated the dilemma of women's education, which questioned how a better education could help women in the household (Harrison, 1915, pp. 117). This one encounter with her aunt increased the scorn she felt towards the domestic sphere, recognizing that if she happened to enter it, she would be robbed of the opportunities to satisfy her intellectual curiosity. Her scorn towards women's traditional gender roles increased as she entered Newnham in 1874, where she and the other students had to behave according to strict guidelines. Harrison often clashed with the principal, Anne Jemima Clough, regarding her dress and behavior. Her tall figure made her an imposing individual, and she often wore bright tones that made her stand out even more (Peacock, 1988, pp. 93). Harrison always made a conscious attempt at asserting herself as an individual, as she felt that pandering to Victorian ideals would inevitably lead women back to the domestic sphere.

Despite not earning a Newnham lectureship in 1879, Harrison continued her intellectual career, shifting her focus from studies of Greek art to religion and rituals. She longed to continue her research after leaving Cambridge, but she felt that as a woman, it would be near impossible to devote a life purely to scholarship in such a narrow discipline as Greek classics (Harrison, 1925, pp. 82-83). After Harrison successfully conducted pioneering research in the subject of Greek religion, Newnham offered her a position as a research fellow, which she quickly accepted in 1898. The position offered her an opportunity to further study her field, all the while being close to other scholars with similar intellectual ambitions (Lloyd-Jones, 2004).

However, her decision to return to Cambridge did not mean she would give up her defiance towards Victorian gender norms. Entering the field of lecturing could have been considered conforming to what Victorian culture dictated as the ideal female profession, but Harrison exhibited her eccentricity in defiance. According to a former student, Harrison's "striking appearance and often unorthodox clothing, added to her reputation as a scholar, made her one of Newnham's outstanding characters of that period" (Levyns, 1979, pp. 97). She may not have been a conventional role model for many of Newnham's students, but they admired her daring nature and for going against tradition to pursue her intellectual interests. Her teaching skills made lasting impressions on many of her students. Her previous apprehension towards teaching dissipated when she surrounded herself with others similar to her, and although they may not have been as bold in regard to defying gender norms, she still taught them to the best of her abilities in a respectful manner. Even though she entered a feminine profession, she did not necessarily reflect traditional notions of femininity. Through her unconventional dress and behavior to her advancement in the field of classical study, Harrison proved that traditional notions of gender could not prevent women from becoming intellectual pioneers, thus paving a new path for women in the academic world and inspiring those around her.

Charlotte Angas Scott

Women also pioneered in the field of mathematics, as can be seen in the case of Charlotte Angas Scott. She in particular demonstrates how women could bring themselves to the forefront of education through strategic navigation of Victorian tradition, such as keeping a careful eye on her own and other women's appearances. At the age of eighteen, Scott began attending Girton with the aid of a scholarship and began studying mathematics. Girton presented its students with a rigid behavioral code that adhered to Victorian gender norms, which would impact Scott well into her professional career (Kenschaft, 2005, pp. 49).

Scott's greatest achievement while at Girton involved Cambridge's final examinations, also known as the tripos. In 1880, Scott read for the mathematics tripos with the permission of Cambridge's administration. Up to that point, Cambridge had barred women from taking these examinations, despite Newnham and Girton having been in operation for several years. The reasons for this prohibition lay with the preconceived notion that women did not share men's intellectual capabilities and thus should not attempt to take the same examinations as their male counterparts. To participate, women had to receive special permission. Scott's results on the tripos would change that tradition. She scored the eighth highest out of every person who attempted the examination, thus technically making her the "Eighth Wrangler." Although Scott could not officially take on the title of "Eighth Wrangler" due to Cambridge tradition barring women from the rankings, her accomplishment made national headlines and sparked a successful movement within the Cambridge community that allowed women's tripos results to be officially ranked, albeit separately from their male peers (Kenschaft, 2005, pp. 49). Her success defied Victorian tradition, as the final mathematics examinations had long been a pillar of masculinity within Cambridge.

Scott then pursued a career in education, in which she exhibited exceptional skills. Her impressive performance on the mathematics tripos landed her a lectureship at Girton, making her the third member of its staff. While she taught, she continued to further her own studies, earning her bachelor and doctorate degrees from the University of London. However, her most important contribution to education culminated in 1885 when she accepted a position at a burgeoning women's college in the United States, called Bryn Mawr. This newly established private institution assigned Scott as the only associate professor of mathematics and the only woman out of a total of five professors. Her research did not cease; she published multiple articles over the course of her career and a textbook that received praise for its inclusion of recent mathematical topics (Kenschaft, 1987, pp. 105). Her teaching abilities and research prowess allowed Bryn Mawr to become a proper learning center for women and the first women's college in the United States to grant its students the Ph.D. degree.

While at Bryn Mawr, Scott carefully and strategically balanced traditional notions of femininity with her own progressive ideas on women's higher education. Scott, having been educated in Girton's highly conservative atmosphere, transferred those ideals into her own profession, often remarking on the liberal way her students and colleagues dressed. In one letter to the college's president in 1898, she commented on "certain foolish young women on [the] teaching staff whose 'make up' [was] so conspicuous," having been "taken aback" to see one "renewing the make-up of the face between two classes" (Kenschaft, 1987, pp. 102). This criticism did not come from a place of malice but rather concern. With Bryn Mawr rapidly transforming into an epicenter for women's higher education, especially of the graduate level, Scott worried that the behavior of her colleagues could put the college at risk. Wearing make-up would be conforming to feminine ideals to an extent but emphasizing their femininity in a way uncharacteristic of tradition could risk their standing in the intellectual community. Furthermore, the "condescension" of her male colleagues added to her fears that her female colleagues' lack of awareness regarding their appearance could result in the further degradation of female academics in the eyes of the masculine world. A delicate balance existed between femininity and higher education, of which Girton's rigid behavioral code made Scott fully aware.

By carefully navigating gender conservatism, especially that of appearance, Scott achieved an impressive level of success within Bryn Mawr and the American mathematics community that proved women's capabilities within a male-dominated field. She became the co-editor of the *American Journal of Mathematics* in 1899, in which she published several papers, and helped found the American Mathematical Society (AMS) with J. J. Sylvester in 1894. Scott worked vigorously to educate her students, many of whom went on to advocate for mathematics for women. In total, seven women earned their doctorates under Scott's advisement, and all but one became mathematicians (Kenschaft, 1987, pp. 105). Although Scott demonstrated caution when it came to gender norms affecting the careers of her and her students, she nevertheless fought against the odds and used her position as an instructor to inspire the next generation of female mathematicians.

Marion Greenwood Bidder

In addition to mathematics, women became successful in the field of natural sciences, and Marion Greenwood Bidder exemplifies how far Victorian gender norms could affect women's career within the scientific community. Born in 1862, Greenwood received a scholarship to attend Girton in 1879. She began to study natural sciences, another discipline dominated by a masculine culture. In 1884, after the end of her research period, Newnham quickly offered her a position as a demonstrator and lecturer of physiology and botany at the newly established Balfour Biological Laboratory for Women. Despite backlash from her male colleagues claiming that as a woman she would not be able to continue her research and teach, Greenwood accepted the position, remarking that the position would "mean no lessening of research, only a better arranging of the day's work" (Richmond, 1997, pp. 436).   From 1884 to 1896, she published a total of eight papers in the *Journal of Physiology*, in addition to the large workload of being a demonstrator and the lab's eventual director (Mason, 2004). Keeping true to her words, she demonstrated an impressive ability to manage both her research and her duties at the laboratory, defying the expectations of her male counterparts.

Greenwood's career shifted in 1899 when she married a fellow scientist, George Parker Bidder, in 1899, leading her to ultimately resign from her position at Balfour and give up her personal research (Mason, 2004). Her case represents a common predicament among women academics in the late Victorian era. Despite having increased opportunities for independent research at Newnham and Girton, women still faced the pressures of traditional womanhood, which required dedication to marriage and housewifery. Although some women continued to research as a partner to their husbands, others, like Greenwood, ceased completely. Those that did continue as researchers oftentimes gave up their own research in favor of their husband's (Gould, 1997). In Greenwood's case, her perfectionist nature caused her to relinquish her research in favor of being a better housewife.

Although her academic research had ceased, Greenwood used her position as a housewife to continue to promote women's education and defy the notion that women should be permanently relegated to the domestic sphere. In 1901, she and Florence Baddeley published *Domestic Economy in Theory: a Text-Book for Teachers and Students in Training.* The book aimed to inform its target audience of women about the science behind daily housework, such as sanitation and food contamination. In three sections, Greenwood and Baddeley discussed the science behind household chores, how to properly conduct such chores, and how to present this information in a teaching format. In addition to discussing science, the authors wanted their audience to develop their "powers of observation" and improve their "individual energies" and other "essential mental and moral qualities" (Bidder & Baddeley, 1901, pp. 2). By strategically centering the book around housework, Greenwood conformed to traditional notions of womanhood while promoting the scientific education of women in their positions as housewives. The mention of "moral qualities" in the introduction attests to her conforming to Victorian tradition, and the "mental" ones indicates women’s right to education. Overall, Greenwood defied tradition by establishing herself as a pioneering scientist, and although Victorian gender norms ultimately cut her professional career short, her desire to educate and inspire other women persevered.

Philippa Garrett Fawcett

Philippa Garrett Fawcett represents another case in which an educated woman successfully navigated the professional world by carefully monitoring her appearance. The daughter of lead suffragist Millicent Garrett Fawcett and Cambridge professor and liberal politician Henry Fawcett, she grew up in a politically active environment. By the age of sixteen, she began attending courses at University College, London, and Bedford College, studying mathematics and chemistry. By 1887, she received a Gilchrist scholarship to attend Newnham College. As a student, Fawcett excelled in both her academics and extracurriculars (Siklos, 1990).

Her greatest academic achievement culminated in the summer of 1890, when she read for the first half of the mathematics tripos. When the Cambridge Senate House announced the results, she received the title of “above the Senior Wrangler,” meaning she scored higher than any other student on the exam and became the first woman in Cambridge’s history to do so. (Siklos, 1990, pp. 25). The senior members of the Cambridge Senate House ultimately prevented her from being announced as the “Senior Wrangler,” a masculine title reserved only for the mathematics tripos. Nonetheless, news of her success circulated across the academic world, with the *New York Times* announcing that her success had empowered the movement for women’s higher education and gave “new dignity and encouragement to efforts… and institutions which have had to struggle in their time against much opposition, indifference, and disdain” (“Miss Fawcett’s Honor,” 1890). Similar to Scott, Fawcett used her intelligence to succeed on the mathematics tripos, once again upending a long-standing pillar of masculinity.

Along with her unprecedented success at Cambridge, Fawcett succeeded in traversing traditional gender norms that had the potential to threaten her status as an academic. During her time as a student at Newnham, she understood the importance of keeping her dress and manner being as modest as possible. A friend talking to the *New York Times* remembered Fawcett as dressing in the "most unassuming style" and being the "quietest of girls, with a perfect hatred of all formality and show" ("Miss Fawcett's Honor," 1890). According to Henry Montagu Butler, the master of Trinity College at the time, when Fawcett learned of her success at the tripos, she kept her excitement under control and remained the "perfect picture of modest maidenly simplicity" (M. G. Fawcett, 1924, pp. 141). As a student, she had to conform wholeheartedly to Victorian ideals of womanhood, as doing anything out of the ordinary would potentially jeopardize both her and her school's social standing. Traditional notions of gender continued to affect her when she began to conduct research. While performing physics research at the Cavendish Laboratory, Fawcett worked under Sir J.J. Thomson, the director of the laboratory and who doubted the intellectual capabilities of women (Gould, 1997, pp. 127). Her 1894 physics paper opened with the assertion that the experiments of the study "were undertaken as Professor Thomson's suggestion, and have been carried out with advantage of his advice and help" (P. G. Fawcett, 1894, pp. 263). As a woman in a male-dominated discipline, she found it difficult to establish herself as an academic. If she wanted her work to respected by the scientific community, she had to attach herself to an influential male figure, and in this case, she chose to mention the Cavendish director by name to increase her chances of recognition. Altogether, her strategic navigation of gender conservatism allowed her to establish herself not only as an exemplary student but also as an outstanding researcher.

By carefully adhering to gender norms, Fawcett successfully established a career for herself and defy the status quo to better women's chances in the professional field of education.. After completing a year of research in 1893, she began a lectureship at Newnham, a position she remained in until 1902. She helped students prepare for the mathematics tripos, and they often remembered her for her exceptional teaching skills (Siklos, 1990, pp. 33). Though she originally wished to pursue mathematics as a career, her mother and other like-minded figures showed concern about a woman in a masculine field, ultimately discouraging her from doing so (Gould, 1997, pp. 136). Despite the influence of Victorian ideals of womanhood, Fawcett demonstrated immense enthusiasm for mathematics. Teaching allowed her to conform to tradition, while also giving her the opportunity to partake in a subject she wholeheartedly enjoyed and inspire her students to cultivate their own abilities. Her high expectations of her students helped prepare them for the criticisms of the masculine world of academics. Her own experiences at Newnham further helped her in aiding her students traverse the conservative environment with Cambridge and increase their chances of success within the academic and professional worlds. Despite Victorian ideals of gender limiting her ability to pursue mathematics as a profession, Fawcett used the same determination that earned her the title of "above Senior Wrangler" to carve out a career in education that had lasting effects on those around her.

Conclusion

Overall, the careers of these four women illuminate the ability of women to revolutionize the field of education from within and further promote the movement for women's higher education. Each of these pioneering women, at one point or another, returned to her former college to teach the next generation of students. Their navigation of gender conservatism within the Cambridge community demonstrates common situations women faced in the academic field. For instance, they would frame their work within gender norms, helping them earn the respect of their more conservative colleagues and further validify their professional positions. Greenwood, Fawcett, and Harrison used this gendered framework in varying ways, with Greenwood publishing a textbook regarding the science behind domestic economy, and Fawcett and Harrison centering their respective careers around education. By balancing their professional and intellectual aspirations with traditional notions of Victorian womanhood, they gained the ability to better contribute to the movement for women's higher education.

Furthermore, the ever-present role of gender conformity in the lives of these academic women can be seen. For instance, Scott and Fawcett emphasized the importance of appearance, as many women in university could risk their standings as intellectuals if they did not adhere to ideals of Victorian dress and behavior. In a similar fashion, Greenwood relinquished her research to become a housewife, conforming to domestic tradition. However, in doing so, they gained the opportunity to advocate for women's rights in the intellectual community and to inspire the next generation of female scholars. With their adherence to tradition, each of these women defied the expectations of their male colleagues, be it through bold appearances, record-breaking test scores, or administrative roles within Cambridge. Although these women may have been pioneers in their respective fields, their experiences and strategies in regards to navigating Victorian tradition reflect the choices of many women who wished to enter and promote the movement for higher education.

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