

Exploring the Feminist Wave of Higher Education in Nineteenth Century Russia

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Abstract

During the second half of the nineteenth century, Russian society has changed considerably that it had granted women the opportunity to pursue higher education, initially in Russia and later abroad after the university ban in 1864. Taking inspiration from nihilist literature, such as works by Chernyshevski or Turgenev, as well as feminism, which arose through the expansion of the Enlightenment, Russian women defied the traditional structured role of women as only wives and mothers, and pursued higher education because they believed that with a degree, it would grant them social and economic independence. It is through these actions, I argue, that Russian women have established a feminist wave of female higher education from the eighteen-sixties onwards, which preceded first wave-feminism.

There are two reasons for establishing this period as a wave. Firstly, the women who initially studied abroad and received a doctorate, such as Suslova and Bokova, managed to inspire a generation of Russian women to follow in their footsteps. Secondly, the actions of these women after graduation in establishing an academic career, through performing experiments, writing papers, conducting field work or expeditions and teaching, serve as a testament that women were capable of working in an environment that was traditionally designated for men. This dissertation will use rationalism, to explore the motivations of Russian women who studied abroad, and post-structuralism, to explore how traditional nineteenth century Russian society began to change, as a result of Russian women pursuing higher education.

Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. Additionally, this thesis, to the best of my knowledge, contains no material previously published or written by another person except where due references are made within dissertation itself.

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Signed:

A handwritten signature in blue ink, appearing to be 'M. Nazarov', written over a light blue rectangular background.

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Introduction

Ever since the Enlightenment, which originated in Russia in the eighteenth century during Peter I's reign, Russia set forth on a path to modernise its nation and, slowly over time, grant women more power and agency over their lives. From the abolition of arranged marriages in 1722, to the agency provided by changes to the property law in 1753 and the first experiments in female education with the opening of the Smolny Institute in 1764, more opportunities started to open for women that would slowly make Russian women more socially and economically independent. This momentum continued into the nineteenth century, when with an examination of the discourse surrounding the women question, which was a social and political discourse that aimed to critique, question and analyse the traditional structured role of women in society in Russia during the nineteenth century, Russian women started to enrol in higher education courses in Russia and later abroad following the university ban in 1864. The actions these women took to pursue higher education were significant, because not only it provided them with an opportunity to acquire social and economic independence, but more importantly, it helped reform the entire nation, as they started to challenge the structured norms presented in the gender roles in nineteenth century Russian society that saw them as only wives and mothers. This sentiment is further echoed in an article by Ruth Dudgeon, who argued that:

"Russian women students established a tradition of female intellectual activity, not only as teachers but as doctors, scientists, engineers, mathematicians, social activists – in virtually all of these areas that were traditionally reserved for men."¹

While researching this topic, I discovered from scholars, such as Stites, Engel, Clement-Evans, Johanson and Dudgeon that there was a focus on local education

¹ Ruth Dudgeon, "The Forgotten Minority: Women Students in Imperial Russia, 1872-1917", *Russian History*, 9 (1), (1982) pg. 26.

programs in nineteenth century Russia, and how that helped emancipate women and provide them with choices regarding their lives that were not available before. Regarding scholars from the Soviet Union, they, at least initially, tended to be silent on Russian women history in the nineteenth century, as they did not believe it was a subject matter that needed to be studied in great detail. Nevertheless, the goal of this dissertation is not to focus on these local programs specifically, as much information is available already. Instead this thesis aims to focus on Russian women who decided to travel abroad to cities such as Zurich, Heidelberg, Paris or Naples, while a few even traversed the Atlantic to study in United States of America. The reason for this approach, is that I wanted to capture the beginning of the process of women in nineteenth century Russia, who decided to pursue higher education. Furthermore, it is well known that one of the reasons why these local education programs existed, in part because the government wanted to keep women from travelling abroad for study, especially to the Swiss city of Zurich, due to fears Russian women would become radicalised in more liberal European cities. Moreover, although there is minimal literature regarding Russian women who travelled abroad in general, extensive research on this topic has been done by Bonner, Koblitz, Creese, Volkova and Trude. A closer examination of this literature will be conducted in the following section in the literature review.

My thesis will argue that Russian women who travelled abroad for study in higher education, formed a core component of a feminist wave that started from the eighteen sixties onwards and became critical to the success of the wave. I will prove that the pursuit of education, including higher education, was an important step for the emancipation of women in the nineteenth century, as during that time, the number of Russian women in foreign university corridors rose sharply. My analysis, therefore, offers an important and unique analysis of women in nineteenth century Russia. Moreover, my argument is further echoed by Dudgeon who noted that it would be difficult to imagine the progress of women's movement in Russia before and after 1917

to have any meaningful progress without the sudden growth of female education in the nineteenth century.²

Furthermore in order to examine this wave of feminism more closely, I have used Stites' analyses of responses to the women question, namely nihilist and feminist,³ to devise three chapters that will explore specific components of this wave and how it enabled women to break through traditional structured norms that saw women as only wives and mothers. As a result, women, in this wave of feminism, proved that they were capable of performing actions that traditionally were designated for men. Moreover, this argument is not intended to diminish the efforts of women in the subsequent three feminist waves in the twentieth century, who fought for legal rights and suffrage in the first wave; family and sexuality rights and equal pay in the second wave; and the expansion of the feminist struggle to a global scale with intersectionality in the third wave.

In the first chapter of this thesis, I will explore the nihilist response to the women question, as the first Russian women to initially pursue higher education were inspired by nihilist literature by Turgenev and Chernyshevski. Although they were met with some opposition that led to the university ban, they persevered and sought higher education abroad in the medical college of Zurich. I will conclude this chapter by exploring the Zurich ban in 1874, which prevented anyone still studying in Zurich from acquiring state employment in Russia. In the second chapter of this thesis, I will explore the response to the Zurich ban, as though some Russian women left Zurich to participate in the revolutionary underground movement, others chose to stay in Zurich or study elsewhere in Switzerland such as in Bern or Geneva; elsewhere in Europe such as Germany, France and Italy; or even across the Atlantic in the United States of America. It is important to note that there were other influences for women to pursue higher education, as feminism, in addition to nihilism, especially those affected by the

² Ibid.

³ Richard Stites. *The Women's Liberation Movement in Russia: Feminism, Nihilism, and Bolshevism, 1860-1930*. Vol. 59: (Princeton University Press, 1978)

Zurich ban, became just as valid motivation for Russian women to travel abroad to pursue higher education. In the third chapter of this thesis, I will expand on the core parts of this wave of higher education, in order to illustrate other methods through which Russian women enacted social change in the nineteenth century. These included the nihilist persona that some women adopted to distinguish themselves from their bourgeois sisters; the radicals, as some women understood that the emancipation of women could occur only if they overthrew the entire social and political structure; and the feminists, who sought to work within existing political and social structures to help women by establishing cooperatives and local education programs, such as the Bestuzhev courses.

Throughout my research I will utilise two methodologies. The first is rationalism, which I will use to explore the motivations behind Russian women's efforts to pursue higher education. I will therefore prove that Russian women pursued higher education based on the assumption that obtaining a degree, would grant them economic and social independence. The second methodology I will use is post-structuralism, in order to display the increasing number of women participating in higher education as proof that in nineteenth century Russian society that the gender norms and the structured traditional role of women in society as only wives and mothers were being challenged. In order to advance this argument, I will be utilising primary resources from newspapers, diaries and letters, along with official records in archives. Examples of primary resources I will utilise include the corpus of the *Royal Society's Catalogue of Scientific Papers 1800-1900*, the memoirs of revolutionary figure Vera Figner, which helped create a more authentic image of a nihilist women,⁴ the memoirs of Swiss professor Jan Meijer who detailed extensively of the women who studied medicine at the University of Zurich in the nineteenth century;⁵ and the translated autobiographical

⁴ Vera Figner. *Studenchiskie gody*. (Student Years) (Moscow: Golos Truda, 1924); Vera Figner. *Запечатленный труд* (Imprinted Works). (Stuttgart: Direct Media, 2016) (Reprinting)

⁵ J. M. Meijer. *Knowledge and Revolution: The Russian Colony in Zurich (1870-1873)* (Assen, Netherlands: Van Gorcum, 1955).

resource of Russian tsarist women by Clyman and Vowles,⁶ which helped me discover the motivations of women pursuing higher education. By utilising these methodologies, I will prove that a feminist wave arose in Russia during the nineteenth century, and that female higher education was critical to its success.

Furthermore, by exploring the lives of women from other nations, which I did briefly across all three chapters, I will show that the actions of Russian women at this time were not a unique pursuit, but part of a universal struggle to emancipate women from their roles in traditional societies. As a result of this universality, I will show that the nineteenth century feminist wave was not just confined to Russia.

⁶ Toby W. Clyman & Vowles, Judith. *Russia through Women's Eyes: Autobiographies from Tsarist Russia*. (Yale University Press, 1999)

Literature Review

The research field of Russian women history, much like other social histories, arose at a time in the nineteen sixties and nineteen seventies when the world witnessed vast social movement and change. This social backdrop helps to explain how history was being studied and analysed at this time, as historians began to focus on people who had been largely ignored in the past, such as the Australia's Aboriginal and Torres Strait Islander peoples, African-Americans in the United States and more importantly to my project, women in nineteenth century Russia. Through a closer examination of the historiography in Russian women history, there was, at least in the initial phase, research that was contributed by foreign scholars such as Stites, Clement-Evans and Engel. These authors wanted to re-examine events in Russian history, such as the revolution of 1917, the beginning of the Soviet regime and the Second World War through the eyes of women. It is important to note that many scholars living in the Soviet Union, who did not experience any sort of social change during this period, did not believe that this field of history was worth investigating.

According to Russian gender historian Natalia Pushkareva, the struggle for women's emancipation was ignored as a separate component of history by Soviet historians, and instead became an inseparable part of a larger revolutionary current.⁷ This accounts for the lack of investigation of women's history by Soviet scholars. This mentality is further reflected in the belief that it was the Bolsheviks and the revolution of 1917 who took ownership of some of the greater feminist accomplishments, such as women's suffrage, women's access to various professions and a six-week maternity leave, even though these rights were granted to women before the revolution of 1917.⁸ Other reasons for ambivalence towards women's history in the Soviet Union were the apparent and assumed resolution of the women's question by the later nineteen

⁷ Natalia Pushkareva. "Soviet and Post-Soviet Scholarship of Women's Participation in Russia's Socio-Political Life from 1900 to 1917." *Revolutionary Russia* 30, no. 2 (2018): pg. 209.

⁸ Ibid, 209.

forties,⁹ and the lack of an academic spark even when attempts were made to introduce women's history into Soviet scholarship. Examples include one of the early book about women in the Bolshevik party, which essentially became an overall history of the Communist party and the publication of an international women's socialist conference in 1915 in the journal *Istoricheski Arkhiv*, which had no additional commentary in its documents,¹⁰ and no real push from scholars to investigate them further. Therefore, this rewriting in the Soviet historiography, assumed resolution of the women's question and the lack of academic inquiry when presented with an opportunity to study women's history, points to a critical conclusion that women's history was considered unimportant and was one reason why minimal scholarship about women's history emerged from the Soviet Union. Furthermore, the historiography of the education of Russian women in the nineteenth century follows the same trajectory as general Russian women history, as most of its earlier literature, as argued by Volkova, were written by foreign academics.¹¹ Most examples of significant scholarship coming from the Soviet Union were biographies of noteworthy Russian women during that period.

As mentioned in the introduction to this thesis, there was more focus in the historiography on women who stayed in Russia to study in local education programs, as opposed to Russian women who studied abroad. For this reason, I have focused on Russian women who travelled abroad to pursue higher education. Regardless, the dominance of the literature's focus on women who remained in Russia is reflected through some of the earlier texts of female education in Russia during the nineteenth century, which viewed these events through a radical movement lens. This includes Robert McNeal's 1971 article "*Women on the Russian Radical Movement.*" McNeal

⁹ V. L. Bil'shai. "Sovetskaia demokratiia i ravnopravie zhenshchin v SSSR (Soviet democracy and the equality of women in the USSR)" (Moscow: Gospolitizdat, 1948.)

¹⁰ V. S. Nevolina and. V. P. Orlova "O mezhdunarodnoi zhenskoi sotsialisticheskoi konferentsii v 1915g. Dokumenty Instituta marksizma-leninizma pri TsK KPSS." ('On the International Women's Socialist Conference in 1915 Documents of the Institute of Marxism-Leninism attached to the Central Committee of the CPSU ') *Istoricheskii arkhiv* 4 (1960): 106–25.

¹¹ Olga Valkova. "The Conquest of Science: Women and Science in Russia, 1860–1940." *Osiris* 23, no. 1 (2008), pg. 136.

argued that women were considered equal partners with men in the revolutionary movement, while he further argued that women who were involved in higher education were less likely to be involved in revolutionary activities.¹² McNeal's argument is echoed by Engel in her 1979 article "*Women Medical Students in Russia, 1872-1882 - Reformers or Rebels.*" Engel argued that women involved in higher education were less likely to be involved in radicalism,¹³ while further noting that many women who did become involved in revolutionary activities were women who travelled abroad to study.¹⁴ Engel further examines radical women in her 1975 book "*Five Sisters: Women against the Tsar*," where she collected the memoirs of five women who participated in the revolutionary underground movement.¹⁵

Perhaps one of the most important texts in Russian women history was Stites' 1978 book, "*Women's Liberation Movement in Russia: Feminism, Nihilism and Bolshevism: 1860-1930.*" Stites used the narrative of responses to the 'women question' to understand the progress of change experienced by Russian women during the second half of the nineteenth century and early twentieth century. With regards to female higher education, although he did mention some Russian women who did travel abroad to study, he focused instead on events in Russia, especially the conflicts of interest faced by nihilists and feminists when attempting to establish local education programs for women. Indeed, it was this local education program that became the focus of foreign scholars including Engel, who argued that these programs were called women's universities¹⁶ that helped women to become independent. However, Engel later said that these programs had funding issues, with some students succumbing to

¹² Robert H McNeal. "Women in the Russian Radical Movement." *Journal of Social History* 5, no. 2, (1971), pg. 151, 161

¹³ Barbara Alpern Engel. "Women Medical Students in Russia, 1872-1882: Reformers or Rebels?" *Journal of Social History* 12, no. 3 (1979): 394-414.

¹⁴ J. M. Meijer, *Knowledge and Revolution: The Russian Colony in Zurich (1870-1873)* (Assen, Netherlands: Van Gorcum, 1955), p. 208-212.

¹⁵ Barbara Alpern Engel and Clifford N Rosenthal. *Five Sisters: Women against the Tsar*. (Psychology Press, 1987)

¹⁶ Barbara Alpern Engel, *Mothers and Daughters: Women of the Intelligentsia in Nineteenth-Century Russia* (Illinois: North-western University Press, 1983), pp. 61.

starvation.¹⁷ Regardless, they were an integral component, as argued by Engel, of a larger narrative of change and difference for women in Russia that spanned three hundred years, starting with the beginning of the Enlightenment during Peter I's reign in the eighteenth century.¹⁸

For an in-depth analysis of local female higher education in nineteenth century Russia, Johanson has contributed important studies that detail the political circumstances and challenges faced by Russian women when pursuing higher education. In her 1979 article "*Autocratic Politics, Public Opinion, and Women's Medical Education during the Reign of Alexander II, 1855-1881*," she focused on the tenuous relationship between the Russian state and the women in their pursuit of higher education, as well as the fragile nature of the local education programs due to ministerial infighting, especially between the minister of war, Miliutin, and minister of education, Tolstoi, and the surprising ambivalence of the tsar.¹⁹ Although Johanson focused on local programs, her article is critical to understanding the circumstances that brought about the growth of female higher education and its subsequent backlash after the regicide of Tsar Alexander II, during the reign of his conservative son Alexander III. In 1987 Johanson expanded this focus into one of few books about female higher education during Russia in the nineteenth century, which was entitled "*Women's Struggle for Higher Education in Russia: 1855-1900*." Although the book's main focus was on local education, there is one chapter that is devoted to women who studied abroad in the nation of Switzerland.²⁰

Moreover, another article that focuses on local education programs was written in 1982 by Ruth Dudgeon, where she discusses the growth of local education

¹⁷ Vrach, No. 35 (1880), 570;

E.S. Nekrasova, "Zhenskie vrachebnye kursy v Petersburge," Vestnik Evropy (Dec., 1882) pp. 834-836, 841.

Barbara Alpern Engel. *Women in Russia, 1700-2000*. (Cambridge University Press, 2004), pg. 79.

¹⁸ Barbara Engel, *Women in Russia: 1700-2000*. pg. 3.

¹⁹ Christine Johanson. "Autocratic Politics, Public Opinion, and Women's Medical Education during the Reign of Alexander II, 1855-1881." *Slavic Review* 38, no. 3 (1979): pp. 426, 438

²⁰ Christine Johanson. *Women's Struggle for Higher Education in Russia, (1855-1900)*. McGill-Queen's Press-MQUP, 1987. pp. 51-58.

programs, particularly the Bestuzhev courses, in Russia during the nineteenth century.²¹ In her article, Dudgeon placed great importance of higher female education to the overall women's movement, arguing that it was difficult to imagine that the women's movement was to have any progress after 1917, if it was not for these Russian women students,²² whom she lauded for establishing a tradition of female intellectual activity in all areas such as doctors, scientists, engineers and mathematicians that were traditionally reserved for men.²³

Evidently, there is a great depth of resources from some of the most prominent historians of Russian women history about female higher education in Russia. However, scholars who were not entirely focused on Russian women history have produced resources detailing the experiences of women who pursued higher education abroad. I have focused on Russian women who travelled abroad, because I wanted to examine the beginning of the process when women started to question their traditional gender roles and pursued higher education. Additionally, it is well documented that local education programs were created because of the efforts of Russian women who studied abroad. This is because the Russian government approved these local programs with a view to preventing radicalisation among Russian women, based on the assumption that women who studied abroad were vulnerable to radical ideas.

One of the earlier resources that highlighted the higher education of Russian women abroad was written by a leading historian of medicine, Thomas Neville Bonner. Bonner wrote numerous texts lauding the significance of what he referred to as the Zurich Experiment, praising both the women who took a chance on studying in a university outside Russia and the institution itself for its forward thinking in providing a space for women across the world to receive a high-level of education in the medical sciences. In a 1988 article Bonner wrote about the experiences of American women,

²¹ Ruth A Dudgeon. "The Forgotten Minority: Women Students in Imperial Russia, 1872-1917." *Russian History* 9, no. 1, (1982): 1-26.

²² Ibid, 26.

²³ Ibid, 26.

highlighting the superiority of the Swiss institution over American universities. Although American universities admitted women to study medicine earlier than Switzerland, American courses were much shorter and women gleaned very little knowledge from them.²⁴ A year later, in another article Bonner described the success of Zurich in more detail, as he profiled seven women (two Russians, three English, an American and a Swiss) in their extraordinary struggle to be admitted, study and pass their final examinations in the eventual hope they would be treated as equals by their male colleagues in the academic world.²⁵ These two articles, while not focused on Russian women exclusively, is an excellent example of the expansiveness of women's pursuit of higher education in the nineteenth century.

Branching out from medicine, Creese, who worked in chemistry and other scientific fields, showed that women who travelled abroad studied other disciplines than medicine, such as chemistry. This point is highlighted in her 1998 article, in which Volkova, Lermontova and Shumova are discussed.²⁶ This discussion was expanded more comprehensively in her book *"Ladies in the Laboratory IV: Imperial Russia's Women in Science, 1800-1900: A Survey of Their Contributions to Research,"* which provides detailed biographical information of women from Russia and Poland who studied a variety of disciplines including zoology, mathematics, biology, astronomy, geology and palaeontology.²⁷ These women were featured in the corpus of Royal Society's Catalogue of Scientific Papers 1800-1900.²⁸ Furthermore, like Bonner, Creese has also demonstrated the universality of the pursuit of female higher education. This is evident in Creese's first three volumes of her book series, which focused on women

²⁴ Thomas Neville Bonner. "Medical Women Abroad: A New Dimension of Women's Push for Opportunity in Medicine, 1850-1914." *Bulletin of the History of Medicine* 62, no. 1 (1988): 58-73.

²⁵ Thomas Neville Bonner. "Rendezvous in Zurich: Seven Who Made a Revolution in Women's Medical Education, 1864-1874." *Journal of the History of Medicine and Allied Sciences* 44, no. 1, (1989): 7-27.

²⁶ Mary RS. Creese. "Early Women Chemist in Russia: Anna Volkova, Iuliia Lermontova, and Nadezhda Ziber-Shumova." *Bulletin for the History of Chemistry*, no. 21 (1998): 19-24.

²⁷ Mary RS. Creese *Ladies in the Laboratory IV: Imperial Russia's Women in Science, 1800-1900: A Survey of their Contribution to Research.* (Rowman & Littlefield, 2015.)

²⁸ Royal Society London, *Catalogue of Scientific Papers, 1800-1900*, 19 vols. Cambridge: Cambridge University Press, 1867-1925.

from Britain and America (volume one), continental Europe (volume two) and the British Colonies, including South Africa and Australia (volume three).

Moreover, Volkova also focused on Russian women in their pursuit of higher education in her article "*The Conquest of Science: Women and Science in Russia, 1860–1940.*" She expanded on this pursuit of higher education with a longer time span and articulated three ways for Russian women to become a scientist. Russian women's options in this respect were to either study abroad, study in a local education program or become associated with a known scientist.²⁹ Through Russian women pursuing these options, Volkova argued that there was a gradual acceptance of women in the scientific world. This transformation took place through Russian women joining scientific societies, organising expeditions, conducting experiments, writing articles or collaborating with other scientists.³⁰ However, Volkova has noted women still faced obstacles in receiving acceptance in the academic world, with either the Russian state during the tsarist period or the bureaucracy and other male academics in the Soviet period.³¹

While the above scholars focused on specific individuals who made important contributions in academia, Ann Hibner Koblitz, a pioneer in the history of women in science, in contrast focused instead on the political movement of the eighteen sixties that enabled women to participate in higher education, which helped create a plethora of female Russian scientists who made important contributions to their respective fields.³² Koblitz concluded that Russian women were pioneers in higher education in scientific fields across continental Europe.³³ However this claim is disputed in a 2016 article by Maurer Trude, who stated that while these women may be considered

²⁹ Olga Valkova. "The Conquest of Science: Women and Science in Russia, 1860–1940." *Osiris* 23, no. 1 (2008), 136-165.

³⁰ Ibid. 140, 142-3, 144 145, 148

³¹ Ibid. 154-165.

³² Ann Hibner Koblitz. "Science, Women, and the Russian Intelligentsia: The Generation of the 1860s." *Isis* 79, no. 2 (1988): 208-26.

³³ Ann Hibner Koblitz, *Science, Women and Revolution in Russia*, Routledge, 2000, pg. 11.

pioneers for women in Russia to pursue higher education,³⁴ they cannot be considered to be pioneers for German women. This reason for this claim is that although three Russian women of Kovalevskaya, Lermontova and Eivreinova graduated from German universities in the eighteen seventies and became the first Russian woman to obtain a doctorate of mathematics, chemistry and law respectively, official matriculation of women in German universities did not occur until the end of the nineteenth century, and the first women to matriculate at that point were not Russian.³⁵ While there is merit to her point, this does not discount the influence of Russian women who first attended institutions of higher education abroad. This is because social progress in history is seldom linear and there may be setbacks along the way, however any small progress that is made, should always be valued.

Evidently, there is a varied range of resources available regarding women from Russia participating in higher education abroad. What these resources has shown is that there is an emerging rejection of traditional structured gender norms from nineteenth century Russia, as women sought to find paths that will make them social and economic independent. A particular manifestation of this rejection is explained in Wilson's 2014 dissertation "*Radical Chastity: The Politics of Abstinence.*" Although she was drawing from literature by Dostoevsky, Chernyshevski and Tolstoi, Wilson noted that nihilism became an important influence on women's lives when they studied abroad. This is reflected further in her dissertation, when she explores the politics of nihilism, and that those Russian women who embraced nihilism became distinct from their bourgeois sisters back in Russia.³⁶

All of these resources share a similar theme of women's gradual emancipation in the nineteenth century. However this periods has not been named specifically as a feminist wave, in which education, including higher education, became an important

³⁴ Maurer Trude. "Russian Women in German Universities: Pioneers of Female Higher Education?" pg. 81,

³⁵ Ibid. pp.70-71.

³⁶ Jennifer Wilson. "Radical Chastity: The Politics of Abstinence in Late Nineteenth Century Russian Literature." (Princeton University, 2014), pp. 40-81.

first step to emancipate women in the nineteenth century through examples of successful women working in male dominated environments and through the sheer number of Russian women in foreign university corridors. In this dissertation I aim to argue that a feminist wave of female higher education occurred from the eighteen sixties onwards, and was separate from first-wave feminism.

Chapter One: The Origin of the Wave at the University of Zurich: How Some Russian Women Rejected Traditional Structured Norms through the Pursuit of Higher Education Abroad

From the second half of the nineteenth century, Russian women, initially inspired by the nihilist literature of Turgenev and Chernyshevski, sought to pursue higher education. Although welcomed by professors and universities inside Russia, the Russian state blocked access for higher education institutions to women in 1864. Unperturbed by these actions, Russian women sought higher education abroad initially at the liberal University of Zurich. There, two notable women, Suslova and Bokova, became some of the first Russian women to obtain a doctorate in medicine. This chapter aims to argue that these course of events formed a core part of a new Russian woman, who in their examination of the 'women question,' disrupted the traditional structured gender norms that saw them as only wives and mothers through the pursuit of higher education. These women believed that pursuing higher education and receiving a diploma, would grant them social and economic independence. As a result, they not only transformed themselves through their actions, they also transformed society, through the inspiration of a generation of Russian women to also pursue higher education. As a result, this inspiration led those Russian women who studied at higher education institutions abroad to form a core part of the feminist wave. Furthermore, while not a central component of my thesis, I will examine briefly five non-Russian women who also studied in Zurich, in order to display the universality of the women's pursuit of higher education.

1.1) Background

The pursuit of female higher education was a gradual process, representative of a much larger change in Russia that originated with the birth of the Enlightenment in the eighteenth century. Through various reforms, women were given more power and agency of their own lives. This process started with Peter I (1689-1725) who introduced reforms that helped empower women. These include the abolition of arranged marriages in 1722, as he thought the practice was barbaric that led to resentment and domestic violence,³⁷ the creation in 1702 of a betrothal period of six weeks (*obruchnie*) before a wedding and the formalisation of the procedure of divorce in 1721. Following Peter's rule, this process continued through the policies of a succession of four female empresses,³⁸ who introduced new reforms that granted women more control over their lives and greater opportunities. These reforms included laws by Elizabeth (1741-1762) in 1753 to grant women the authority to manage their own property, and the establishment of the Smolny Institute by Catherine II (1762-1796) in 1764, which sought to educate noble girls, aged between six to eighteen on a wide variety of subjects such as sewing, drawing, law, mathematics, geography, history, economy, science and ethics.³⁹ A year later, a similar institute to educate daughters of commoners, called the Novodechii Institute was established.⁴⁰ These reforms, sought to create an atmosphere that helped facilitate female higher education more possible, demonstrating to women that they were capable of performing actions that traditionally were designated for men. This is further exemplified by some prominent Russian women in the late eighteenth and early nineteenth century. These include Ekaterina Dashkova, who became the head of two Russian academies at the same time, Nadezhda Durova, who, disguised as a man, participated in the Napoleonic

³⁷ Basil Dmytryshin. *Modernisation of Russia under Peter I and Catherine II*. (New Jersey: Wiley, 1974.)

³⁸ These Empresses include Catherine I (1725-1726), Anna (1730-1740), Elizabeth (1741-1762) and Catherine II (1762-1796)

³⁹ Kelly, Catriona. *Refining Russia: Advice Literature, Polite Culture and Gender from Catherine to Yeltsin*. New York: Oxford University Press, 2001, pg. 27

⁴⁰ Bisha, Robin. *Russian Women, 1698-1917 Experience and Expression: An Anthology of Sources*. Bloomington, IN: Indiana University Press, 2002, pp. 162-163.

Wars and Natalia Sheremeteva, who was one of the first female Russian writers. However, this momentum was halted, when following the Decembrist revolt in 1825, censorship laws were put in place by the reactionary tsar Nicholas I (1825-1855), prohibiting any discussion regarding female higher education.

This move proved to be disadvantageous for female education, as it was not until the defeat of the Russian army in the Crimean War (1853-1856), in which Russia suffered more than half a million casualties⁴¹ along with rampant corruption and bribe-taking, that any significant discussion of female education would be possible. Following the war, in an attempt to modernise Russia's education system, the newly-crowned Tsar Alexander II (1855-1881) passed a series of liberal reforms, including the relaxation of several censorship laws, the pardon of Decembrists who had been exiled to Siberia, the abolition of serfdom in 1861, reorganisation of the judicial administration with the inclusion of jury trials, and the training of young men in the sciences in foreign universities such as Switzerland and Germany.⁴² These reforms represented an attempt by the state to modernise Russia's education system to produce soldiers, administrators and technicians in order to re-establish Russia as a great power. The relaxation of the censorship laws in particular led to the emergence of the women question (*zhenskii vopros*), through public discussion of female education. The 'women question' was a social and political discourse in Russia during the nineteenth century that aimed to critique, question and analyse the traditional structured role of women in society as wives and mothers. It was therefore through this discussion of the 'women question' that female higher education eventually would become possible.

⁴¹ M. Clodfelter. *Warfare and Armed Conflicts: A Statistical Encyclopaedia of Casualty and Other Figures, 1492-2015* (4th edition) (Jefferson, North Carolina: McFarland, 2017)

⁴² Alexander Vucinich, *Science in Russian Culture, 1861-1917* (Stanford, California: Stanford Univ. Press, 1970), pg. xi, 35-37.

1.2) Thaw

This possibility became a reality when through the changing social and political conditions during nineteenth century Russia, a growing nihilist movement started to emerge, whereby women inspired by literature produced by Turgenev and Chernyshevski pursued higher education. Initially they studied in Russia because at the time there was no specific legislation, which barred women from entering universities. These women took inspiration from women who became involved in the academic circle, such as the previously mentioned Dashkova, who became part of a project to create a six-volume dictionary of the Russian language beginning in 1784, Turchianova, who became invested in philosophy when she translated from Latin "*Natural Ethics or the Laws of Morality, Directly Drawn from the Contemplation of Nature*"⁴³ and Golitsyna, who hosted a salon of prominent Russian academics such as Ostragoski, Destreme and Bazaine, and wrote a journal called *L'analyse de la force* (Force Analysis).⁴⁴ These women believed that not only they were capable of interacting in an academic environment successfully, but also to excel in it. Although it must be noted that these women, who although created a groundwork of Russia's future female intelligentsia, they, as they did not partook in any formal education or had extensive academic careers, are beyond the scope of this analysis.

The motivation for Russian women to pursue higher education originated from the initial nihilist movement, as mentioned previously. These women believed that the pursuit of science, often equated with truth, progress and radicalism would lead to the restructuring of Russian society after the emancipation of serfs in 1861.⁴⁵ Additional motivations include the belief that higher education was important for development of the inner self, as noted by Vozdozvova, who said that the study of natural science was *the first instrument for the self-education, for preparation, for any activities and a*

⁴³ Anna Aleksandrovna Turchaninova, *Natural'naia etika ili zakony npravstvennosti, ot sozertsaniia prirody neposredstvenno proistekaiushchie* (St. Petersburg, 1803).

⁴⁴ Eudoxie Galitzine, "*L'analyse de la force*," (The Analysis of Force) (Paris, 1844)

⁴⁵ Peter C. Pozefsky. "Love, Science, and Politics in the Fiction of Shestidesiatnitsy N. P. Suslova and S. V. Kovalevskaia." *The Russian Review* 58, no. 3 (1999), pg. 362.

really useful social life."⁴⁶ Likewise Ivanova, viewed the freedom as equally necessary as food for the nihilist woman's survival, noting that higher education would grant women economic and social independence.⁴⁷ These motivations formed a new type of Russian woman, who would start to attend medical courses in cities such as Moscow, St Petersburg, Kyiv and Kharkiv. Initially, female higher education in Russia was moderately successful, with over sixty women attending the Medical-Surgery Academy in St Petersburg.⁴⁸

However, female higher education would not have succeeded in the following years and decades if not for men in Russia who supported women's right to pursue higher education. Among these men were university professors such as the physiologist Ivan Sechenov, who laid the foundation for the study of reflexes, animal behaviour and neuroscience; chemist Dmitri Mendeleev, who produced the first version of the periodic table of chemical elements; and neurophysiologist Ivan Pavlov, who is best known for his work on conditioning behaviour. These three men, among others, were instrumental in encouraging women to obtain higher education, as they provided a hospitable climate in which women could study.⁴⁹ In addition, support for female higher education came from the institutional level, as according to a ministerial poll in 1861 of Russian universities, it was found that all Russian universities, with the exception of Moscow and Dorpat (Iur'ev) supported women's admittance in their university corridors.⁵⁰ This view was further supported by the results of another ministerial poll of Russian professors, who endorsed and advocated for women's entry

⁴⁶ Elena N. Vodovozova, *Na zare zhizni: Memuarnye ocherki i portrety*, vol. 2 (Moscow, 1987), pg. 80.

⁴⁷ E.S. Vilenskaia, "Proizvoditel'nye assotsiatsii v seredine 60-kh godov XIX v." *Istoricheskie Zapiski*, Vol. 68 (1961), 69. (This quotation was taken from a letter written in 1864.)

⁴⁸ E. Likhacheva, *Materialy dlia istorii zhenskogo obrazovaniia v Rossii*. (SPb, 1899-1901), pp. 472-474; Cynthia Whittaker, "The Women's Movement during the reign of Alexander II: A Case Study in Russian Liberalism," *Journal Modern History*, 48 (June, 1976), pg. 40.

⁴⁹ Ann Hibner Koblitz. "Science, Women, and the Russian Intelligentsia: The Generation of the 1860s." *Isis* 79, no. 2 (1988), pg. 211.

⁵⁰ A. N. Derevitskii, *Zhenskoe obrazovanie v Rossii i zagranitsei* (Odessa: Isakovich i Beilenson, 1902), p. 3;

Ministerstvo narodnago prosveshcheniia (MNP), *Zamechaniia na proekt obshchago ustava Im1peratorskikh Rossiiskikh uniiiversitetov* (St. Petersburg, 1862), part 2, pp. 520-27

to higher education and to professional careers that traditionally were designated for men.⁵¹ Moreover, support for female higher education also came from radical journalists, who published eulogies that exalted the emancipated woman who defied traditional barriers through their participation in higher education or work in medical practice.⁵²

Evidently, the early entries by women into higher education and the support they received from academic and journalistic communities displayed that Russian women were breaking the traditional mould of a Russian women as a wife and mother. Through a new wave of female higher education, these women brought Russia into an era of modernity. This was echoed by Ekaterina Iunge who attended St. Petersburg University and became encouraged by this new change in Russian society.

"Everything was clear to us...Russia will enter a new era, will go hand in hand with the rest of the world along the road of human progress and happiness. And we saw our ardent desires coming true, our dreams becoming a reality"⁵³

1.3) Opposition

However, despite the initial success of Russian women in higher education and the support they received from various communities, there were some who opposed Russian women from entering higher education. These included the curator of Moscow University, who banned women from attending his university because he claimed that the only reason women wanted to attend universities was to 'tease' the students.⁵⁴ Additionally, other professors argued that women attending universities was incompatible with the dignity of the educational institution.⁵⁵ Nevertheless, despite this opposition, women were still allowed to attend universities, as long as they only

⁵¹ MNP, *Zamechaniia*, part 2, pp. 520-27.

⁵² N. A. Dobroliubov "Chto takoe oblomovshchina?" *Sobranie sochineliii*, ed. B. I. Bursov et al., vol. 4 (Moscow-Leningrad, 1962), pp. 307-43.

⁵³ E. F. Iunge, *Vospominaniia* (Moscow, 1933), p. 215

⁵⁴ Mikhail Lemke, "Molodost' Ottsa Mitrofana," *Byloe*, 1/13 (January 1907), pg. 202.

⁵⁵ M. L. Mikhailov, "Zhenshchiny v universitete," *Sovremennik*, no. 86 (1861), p. 506.

audited the classes and did not attend official examinations and receive an academic degree. The reason for this limitation can be traced back to the Russia's "Table of Ranks," which dictated wages, access to professions, tax cuts and other benefits. For example, if a woman was allowed to obtain a degree, she would have access to all positions in the civil service, which would afford her an equal position and status in society with men. This however was inconceivable, because although the new tsar Alexander II, was perceived as more liberal than his predecessor, this sort of concession cannot be made, as the strong idea that Russian women should act only as a wives and mothers still permeated nineteenth century Russian society. Nonetheless, in May 1861, Kharkiv University obtained permission from the Medical Council to admit women as students for a medical degree.⁵⁶ However no women actually undertook final examinations for said degree.

In addition to opposition from several members of the academic community, the tsarist government took notice of female higher education, fearing that the increased nihilism and liberalism in the academic environment would lead students to more radical behaviour and revolutionary viewpoints. In order to curtail this trajectory, Alexander II issued the formulation of a new university statute in 1861, with the intent to transform the Russian youth into competent and loyal servants of the state.⁵⁷ Mass student demonstrations arose from the fear of these new regulations. In addition to protesting women's access to higher education, students also protested the cuts to fee exemptions,⁵⁸ and demanded the termination of incompetent professors, along with permission to hold student meetings and join organisations or student councils.⁵⁹ These demonstrations, brought attention the struggle for women's right to pursue

⁵⁶ S. M. Dionesov, "Russkie tsiurikhskie studentki (Iz istorii vrachebnogo obrazovaniia russkikh zhenshchin)," *Sovetskoe Zdravookhraienie*, 30, no. 6 (May 1971), pg. 68; *Istoricheskii obzor pravitel'steunnykh rasporiazhenii po voprosut o vysshemn vrachebnorn obrazovanii zhenshchin* (St. Petersburg, 1883), pp. 8-9.

⁵⁷ R. G. Eimontova, "Universitetskaia reforma 1863 g.," *Istoricheskie zapiski*, no. 70 (1961), p. 166.

⁵⁸ Patrick L. Alston, *Education and the State in Tsarist Russia* (Stanford, 1969), p. 48; William L. Mathes, "The Origins of Confrontation Politics in Russian Universities: Student Activism, 1855-1861," *Canadian Slavic Studies* Vol. 2, no. 1 (Spring 1968), pp. 38-39.

⁵⁹ S. Ashevskii, "Russkoe studenchestvo v epokhi 60-kh godov," *Sovremennyi Mir*, 1907, No. 7-8, pp. 19-36; No. 9, pp. 48-85; No. 10, pp. 48-74.

higher education. However, the protests would spell the end of higher education for women in Russia, as though most who partook in the protests were men, with only one woman, Nadezhda Suslova, garnered special attention at a rally in St. Petersburg,⁶⁰ the Russian government, who feared more civil unrest, passed new regulations and a ministerial directive in the form of a circulation letter in 1863 that banned women from universities.⁶¹ This measure was taken despite the fact that the academic community opposed the ban, with some university staff including St. Petersburg's history professor Konstantin Kavelin resigning in protest.⁶²

Nevertheless, as a result of this state directive, the university council, (with the exception of St. Petersburg Medical-Surgery Academy who held out a little while longer until May 1864), acquiesced to the government's demands banning women from university study, even as auditors.⁶³ However, one woman, Varvara Rudneva was granted an exemption to continue to study at St. Petersburg despite the ban, as she received an endorsement from the Orenburg district government on the proviso that she would help treat Bashkir Muslim women, who could not visit male physicians because of their faith.⁶⁴ The local ban cut short of Russian women who had been creating a culture of female intelligentsia, at least initially in Russia, through the participation of women in local universities. However, these women would not be discouraged, as they sought to establish a new tradition of Russian female intellectualism by pursuing higher education abroad.

⁶⁰ Panteleev, *Vospominaniia* (Moscow: Izdatel'stvo Khudozhestvennoi Literatury, 1958), pp. 215, 317.

⁶¹ *Sbornik rasporiazhenii po Ministerstvu narodnago prosveshcheniia*, 6 vols. (St. Petersburg, 1866-1901), vol. 3, cols. pg. 560-566 (no. 577, July 20, 1863).

Tishkin, "Zhenskii vopros i pravitel'stvennaia politika 60-70-h godov XIX v.," in *Voprosy istorii Rossii XIX-nachala XX veka: Mezhevuzovskii sbornik* (Leningrad: 1983), pg. 165

⁶² William L. Mathes, "The Origins of Confrontation Politics, pg. 41.

⁶³ *Pravila i instruktsii, sostavleniia sovetamni universitetov: S-Peterburgskago, Kazanskago, Kharkovskago i sv. Vladimira i utverzhdeniia popechiteliami, na osnovanii universitetskago ustava 1863 goda,* *Zhurnal Ministerstva narodnago prosveshcheniia*, (October-December 1863), pp. 3, 14, 36, 59

⁶⁴ M. S. Belkin, "Russkie zhenshchiny-vrachi -Pionery vysshego zhenskogo meditsinskogo obrazovaniia," *Sovetskii vrachebnyi sbornik*, no. 14 (1949)s, pp. 34-35

1.4) Exodus

The first step in establishing a new tradition of Russian female intellectualism came when several Russian women decided to travel to the small central European nation of Switzerland and its largest city of Zurich to pursue medical education. Zurich became an attractive venue for Russian women, as well as other European women, because of its liberal Swiss canton⁶⁵ government, who in 1848 adopted a new constitution, responding to the revolutionary uprisings occurring in Europe at the time, which introduced a direct-democracy government and legally abolished the Swiss nobility.⁶⁶ Additionally, the University of Zurich, which was a newly established institution in 1833, welcomed foreign women by foregoing the usual requirement for candidates to sit entrance examinations and obtain a gymnasium certificate.⁶⁷ Other incentives for Russian women to study in Zurich, included a relative lower living and tuition expenses than Russia and the ability to integrate into the academic environment more easily due to the large and supportive cohort of male Russian students already studying in Zurich.⁶⁸

Moreover, Russian women chose to study in Zurich over other European cities because, with the admission of Maria Kniazhnina, the University of Zurich was one of the first universities in 1864 to admit women to their medical program.⁶⁹ Other countries started to matriculate women at their universities at later dates, including

⁶⁵ A canton refers to the administrative subdivision of a country. In Switzerland, there are twenty-six cantons, and although there is Swiss law that governs all of the cantons, each canton establishes their own enforcement of these laws, government and constitution. This type of arrangement is called Federalism, which can sometimes lead to confusion, as each canton has their own schooling system.

⁶⁶ B. de Diesbach Belleruche. Site Généalogique Et Héraldique Du Canton De Fribourg: La Noblesse En Suisse. (In French) Available online: <http://www.diesbach.com/sghcf/n/noblesse.html>

⁶⁷ A. N. Derevitskii, *Zhenskoe obrazovanie v Rossii i zagranitse* (Odessa: Isakovich i Beilenson, 1902), pg. 7;

J. M. Meijer, *Knowledge and Revolution: The Russian Colony in Zurich (1870-1873)* (Assen, Netherlands: Van Gorcum, 1955), p. 25.

⁶⁸ Ann Hibner Koblitz. "Science, Women, and the Russian Intelligentsia: The Generation of the 1860s," pp. 213-214.

⁶⁹ See the correspondence covering Knjaïnina in *Staatsarchiv Zurich, Frauenstudium 1864-1879* section, general correspondence file in Box 494 16, especially letters of 28 November 1864 and 15 January 1865.

France in 1868 with the admission of Mary Putnam;⁷⁰ the United Kingdom in 1869, when a group of tenacious women known as the Edinburgh Seven fought for female access to higher education (although their actions led to the UK Medical Act in 1876 that allowed women to study medicine, they did not complete their studies);⁷¹ Italy in 1876;⁷² and Germany in 1900.⁷³ Nevertheless, despite these later programs, Zurich remained the premiere academic venue for women studying medical science in the nineteenth century. Although, the first Russian woman, Kniazhnina, to study abroad, did not complete her studies, her actions encouraged a stream of Russian and European women to study in Zurich. This is evident by 1907, where over a thousand women were studying in universities across Switzerland⁷⁴ and by 1914, more than seven thousand women had pursued medical education in Switzerland.⁷⁵

Russian women studying abroad not only contributed to the success of the Swiss institution, they featured predominately in their university corridors. One study found that between 1864 and 1872, of the 203 women who were enrolled as auditors, over seventy percent or 148 of them were Russians.⁷⁶ While there were only 23 English, 10 Swiss, 10 Germans, 6 Austrians and 6 Americans. The success achieved by Russian women studying abroad were reflected in another study in 1873, which found out that of the 103 Russian women studying either in Zurich University or the Polytechnic Institute,⁷⁷ these women constituted more than 40% of all degrees by Russian men

⁷⁰ Rachel Swaby *Headstrong: 52 Women Who Changed Science—and the World*. (New York: Broadway Books, 2015). pp. 3–6.

⁷¹ M. A. Elston. "The Edinburgh Seven" *The Oxford Dictionary of National Biography* (2006)

⁷² H. Lange and L. R. Klemm, 'Higher Education of Women in Europe', (New York: Appleton & Company, 1890).

⁷³ Cauleen Suzanne Gary, 'Bildung and Gender in Nineteenth-century Bourgeois Germany' (Maryland: University of Maryland, 2008)

⁷⁴ Schweizerische Hochschulstatistik 1890-1935, (Bern: Eidgenössisches Statistisches Amt, 1935)

⁷⁵ Ibid.

⁷⁶ V. Bemert. *Universitetskoe obrazovanie zhenshchiny* (Higher Female Education), (St. Petersburg: Merkulev, 1873), pp. 8-9. (In Russian);

Marie Goegg. "Switzerland" in ed. Thomas Stanton. *The Women Question in Europe*, (New York: Putnam 1884), pp. 388-389.

⁷⁷ V. N. Figner, "Ocherki avtobiograficheskie. Zurich," *Polnoe sobranie sochinenii*, 2nd ed., vol. 5 (Moscow, 1932), pg. 47.

and women in Zurich and over 85% percent of all women at the university.⁷⁸ Moreover, regarding the courses taken, Russian women dominated mainly in the medical science and natural science fields. This is evident in the enrolment figures at Geneva University: between 1876 and 1883 of the seventy-six degrees awarded to Russian women, thirty-five were in the natural sciences and thirty-one were in the medical sciences, while only one was in letters.⁷⁹ The successes achieved by Russian women at the University of Zurich cannot be understated, as these significant numbers, along with Russian women's preference to study the natural sciences or medicine demonstrated social changes taking place at the University of Zurich and in Russia, where people began to reject the traditional role of women in society as wives and mothers, forming a core component of a feminist wave in female higher education. Additionally, these numbers display that Russian women were at the forefront of this wave, due to the fact that they outnumbered other European women across Switzerland initially.

However, on closer inspection of Russian women's successes in Swiss universities, one needs to have an examination of why would these women, who had been denied the opportunity to study at home, chose to travel abroad. In doing so, Russian women had to learn to use a language that may have been unfamiliar to them, which in Zurich is German, and study and live in an environment that was unfamiliar and had higher monetary expenses, which led some women who studied abroad to form cooperatives as a means of support, as they often had to share books, laboratory animals and at times even winter coats.⁸⁰ The reason why Russian women chose to study abroad is for the same reason they chose to pursue higher education at home before the university ban, as they believed that obtaining a degree, it would grant them a measure of freedom through economic and social independence. Furthermore, after graduation, Russian women studying abroad women hoped to secure

⁷⁸ Meijer, *Knowledge and Revolution*, pp. 387-389.

⁷⁹ V. Bemert. *Universitetskoe obrazovanie zhenshchiny*, pp. 8-9;

Marie Goegg. "Switzerland" in ed. Thomas Stanton. *The Women Question in Europe*, 388-389.

⁸⁰ Elizaveta Litvonina "Iz vremen moego studenchestva," *Zhenskoe Delo*, (1899), No. 4, pp. 34-63;
S. Panteleeva, "Iz Peterburga v Tsiurikh," *Pervyi zhenskii kalendar*, (1912), pp. 20-31

employment back in Russia, allowing them to become self-sustaining and not reliant on others for help.

Moreover, additional reasons for studying abroad included Russia's women desire to show either themselves or others that they knew back in Russia that they were capable of studying to obtain a degree and working in environments, traditionally were designated for men. For many Russian women, proving this point involved teaching, writing papers, performing experiments, testing theories or hypotheses, conducting expeditions, chairing or being involved in academic conferences and gathering important scientific collections, which were often donated to universities. Moreover, some Russian women were charitable in their intentions to study abroad, devoting their studies to agriculture, nutrition and sanitation, in order to help Russia's newly freed serfs, while others were more practical as some noble women had to rely on other means to obtain wealth as they could not rely on serfs for labour after the serfs emancipation in 1861. Regardless of their reasons, the sheer determination of Russian women to obtain higher education was admirable, as noted by feminist P. Arian who commented that *"one had to have immense bravery and energy to go against society, family, and friends and set out alone for far-off places in search for science."*⁸¹

1.5) Case Study: Suslova, Bokova and others

Several Russian women who studied at Zurich achieved especially noteworthy success. These include Nadezhda Suslova, who became the first Russian woman to obtain a doctorate in Medicine at the University of Zurich in 1867, while Maria Bokova followed suit, obtaining her doctorate four years later in 1871. These two women, along with Knazhnina (who did not complete her studies), became pioneers for other Russian woman who followed suit to obtain their higher education. Like Suslova and Bokova, these women hoped that higher education would lead to independence, previously unimaginable in a predominantly conservative nation with fixed gender roles. Additionally, these women became an inspiration for other European women

⁸¹ P. N. Arian, "Russkaia studentka zagranitsa," *Pervyi zhenskii kalendar*, (1912), p. 57.

who attended Zurich University, as the pursuit of female higher education was not limited to Russia but touched other parts of the world including Western Europe and even the United States of America.

Born as a daughter of a freed serf landowner in 1843 in the small town of Panin, Suslova, along with her sisters received a good education at a boarding school in the city of Tver, a school normally reserved for girls of noble birth. Suslova did not find her schooling particularly interesting as it focused more on language and history than science.⁸² At age eighteen, she applied to the St. Petersburg Medical-Surgery Academy and worked alongside renowned physiologist Ivan Sechenov. After the ban, she was encouraged to apply by Sechenov to Zurich in 1865 and studied there as an auditor. While in Zurich, she demonstrated a quiet determination in her perseverance in a male-dominated classroom. Pathologist Eduard von Rindfleisch, noted she was *"...diligent, very skilful in making microscopic preparations; her questions and answers showed a complete understanding of what was going on. I was very satisfied with this pupil."*⁸³ However, at times, it was not easy for Suslova to adjust to this new academic environment as observed by a student: *"hers was a quiet, serious nature, with deep feelings and a thoughtful, melancholy look from behind deep-set brown eyes."*⁸⁴

Nevertheless after two years of study and working with her advisor Sechenov on nervous reflexes in animals, Suslova applied for a medical degree, which at the time was an unprecedented action at Zurich University. However, without any specific rule barring women from matriculation, the university rector approved and Suslova passed her final examinations in the summer of 1867. In the winter of 1867, she received her degree after defending her dissertation, entitled *"Beiträge zur physiologie der Lymphe"* (On the contributions to the physiology of the lymph glands - with relation

⁸² Jeanette E. Tuve, "Nadezhda Suslova" *The First Russian Women Physicians* (Newtonville, Mass.: Oriental Research Partners, 1984), pp. 13-14.

⁸³ Arthur Kirchof, *Die Akademische Frau: Gutachten hervorragenden Universitätsprofessoren, Frauenlehrer und Schriftsteller über die Beßhigung der Frau zum wissenschaftlichen Studium und Befure.* (Berlin: Hugo Steinetz, 1897), pg. 71.

⁸⁴ Schweizerischen Verband der Akademikerinnen, *Das Frauenstudium an den Schweizer Hochschulen,* (Zurich: Rascher, 1928), pg. 59

to frogs), a topic she had studied with Sechenov.⁸⁵ Her success, as not only the first Russian woman to obtain a doctorate in medicine but also the first woman to graduate from Zurich University, sparked a revolutionary movement akin to a feminist wave in female higher education in Europe and across the world, as she had shown that if a woman was determined and worked hard, there should be no barrier, in relation to gender, in obtaining an academic degree and future employment. This sentiment was further echoed by Professor Rose, who said in Suslova's graduation ceremony:

"...soon we are coming to the end of slavery for women,
and soon we will have the practical emancipation of
women in every country and with it the right to work."⁸⁶

Following her graduation, Suslova returned to Russia and managed in 1868 to open a practice in St. Petersburg devoted to gynaecology and paediatrics. Subsequently, she moved to Nizhniy-Novgorod and then to Alushta on the Crimean peninsula to help the local Tatar population. Despite her devotion to her practice, Suslova continued her involvement in academia, writing articles on hygiene and gynaecology, and making important discoveries regarding eye inflammation in infants.⁸⁷ She had a fulfilling life and lived to the age of seventy-five, leaving behind a generation of women inspired to pursue higher education and bring forth a feminist wave of female higher education that would shatter the traditional gender role of women as only wives and mothers.

Another Russian to follow Suslova to Zurich was Maria Bokova. Born into a noble family in 1839, she at first also studied at the Medical-Surgery Academy in St. Petersburg, where she came into contact with Suslova, and became active with her in the radical group 'Land and Freedom.' After the university ban, Bokova followed in Suslova's footsteps and travelled to Zurich in 1868 to study in medical science. In Zurich, Bokova came across to her classmates somewhat unfriendly although

⁸⁵ Jeanette E. Tuve, "Nadezhda Suslova," *First Russian Women Physicians* pg. 21.

⁸⁶ Ibid.

⁸⁷ Arian (ed.) "Nadezhda Prokof'evna Suslova," *Pervyi zhenskii kalendar* (1901), pp. 377-383.

deserving of her place in the medical school, as one fellow student, August Forel noted, "*she [Bokova] had the same cheekiness as [English Student Elisabeth] Morgan but without the manners, but none doubted her ability.*"⁸⁸ While in Zurich Bokova worked under Frederick Horner in field of ophthalmology, and produced a dissertation on the subject three years later in 1871 entitled "Zur Lehre von der Hypopyon-Keratitis" (To the doctrine of Hypopron Keratitis – inflammation of the eye). Bokova's dissertation allowed her to graduate from the University of Zurich with a doctorate in medicine. However, unlike Suslova who had returned to Russia after studying in Zurich, Bokova continued her studies in ophthalmology in Vienna, before returning to Russia to research the nature of colour blindness and her theory that it could be treated with different coloured lenses.⁸⁹

In addition to the successes of Russian women, non-Russian women also studied at Zurich. These include three Englishwomen: Elizabeth Morgan, Louisa Atkins and Eliza Walker; an American: Susan Dimmock; and a Swiss: Marie Vogtlin. Highlighting the efforts of these women displays the universality of women's pursuit of higher education and portray that Russian women's experience with their difficulties and successes in their pursuit of higher education were not unique. Regarding difficulties for non-Russian women, Englishwoman Morgan had to deal with unflattering comments from anatomist Hermann von Meyer, who, in an attempt to protect her modesty, said some demonstrations were not respectable or decorous for a lady. Morgan replied "*Herr Professor, it is much more shocking and improper to make exceptions here.*"⁹⁰ Afterwards, at her graduation in 1870, she had to defend her dissertation on progressive muscular atrophy, where at one point internist Bierner vociferously attacked her conclusions. Forel, who was in the room at the time, noted the maturity of Morgan and observed her "*cool demeanour, who made notes constantly*

⁸⁸ "Forel to mother, 19 June 1869," *Medizinhistorisches Institut, Zurich*

⁸⁹ Sechenov, *Avtobiograficheskie zapiski* (Moscow: Izdatel'stvo Akademii Meditsinskikh Nauk, 1952), pp. 197-229

Letters from Sechenov to Bokova-Sechova, 1862-1863 and 1890, in Arch. Akad. Nauk, fond 605, opis' 3, nos. 24 and 30.

⁹⁰ August Forel, *Out of My Life and Work*, (New York: Norton, 1937), p. 56.

as Bierner spoke and then responded in a half-hour address until Bierner had enough."⁹¹

For the local Swiss Votglin, she faced her own unique difficulties, including entry requirements and course fees that were much higher than for foreign women. Additionally, although Zurich became the beacon of female higher education, Swiss people were not receptive to the idea of Swiss women attending university. The resistance she faced from her own people was noted by her biographer: "*Let a few foreign women be so shameless and study...a Swiss woman should not and must not.*"⁹²

On the other hand, other non-Russian women attained notable success. For example Englishwoman Walker became the first woman to work in the women's ward in the Zurich Canton Hospital,⁹³ while fellow Englishwoman Atkins was appointed to work at the Birmingham and Midlands Hospital for Women after she spent five years working on her dissertation on pulmonary gangrene in children.⁹⁴ Additionally, the American Dimmock was praised by anatomist Meyer for her energy and steady persistence in her devotion to medical science.⁹⁵ Evidently, each of these women showed poise, dignity and determination in their studies, further contributing to the dismantling of the traditional structured gender roles. Their efforts at foreign universities helped establish the notion that the feminist wave of higher female education was not confined to Russia.

1.6) The End of the Zurich Fairy-tale

Evidently, Zurich was viewed as the prime location for Russian women to pursue higher education. However despite the successes achieved by the growing numbers of women at the University of Zurich and the case studies of the seven women briefly mentioned above, attrition became an issue for these women pursuing higher education, as it became extremely difficult for women to travel abroad and study in a

⁹¹ August Forel, *Rückblick auf mein Leben*, (Zurich, 1934), pp. 45-46.

⁹² Johanna Siebel, *Das Leben von Frau Dr. Marie Heim-Vogtlin 1845-1916*, (Zurich: Rascher, 1928), p. 46.

⁹³ Hanny Rohner, *Die ersten 30 Jahre des medizinischen Frauenstudiums an der Universität Zürich 1867-1897*, 1897, (Zurich: Juris Druck & Verlag, 1972), pg. 29

⁹⁴ *Ibid*, pp. 28-29.

⁹⁵ Viktor Böhmert, *Das Studium der Frauen an der Universität Zurich*, (1872), p. 24.

foreign university, let alone stay there for three to four years to obtain their degree. This attrition was clearly evident, when of approximately 500-700 women, who went abroad to study between 1865 and 1890, around 20 to 30% managed to obtain either a medical or scientific degree.⁹⁶ Reasons for this attrition includes pressure from family, lack of appropriate role models, prejudice from male professors and students at the university and, for some women, a belief that their choice of study in a university was contrary to society's view of a women in nineteenth century Russia. However, this high attrition rate, although unfortunate, still represented a significant change in the role of women in Russian society in the nineteenth century, considering the pressures, difficulties and barriers faced by these women and had to overcome, in their pursuit of higher education.

One particular reason for this attrition stemmed from the Russian government itself, which in a decree published on 21 May 1873, banned women who were still studying in Zurich by 1 January 1874 from pursuing further educational opportunities, which includes undertaking any qualifying or licensing examinations, or obtaining employment within Russia.⁹⁷ This ban arose from the government's assumption that Russian women, who studied abroad, were vulnerable to revolutionary ideas while studying in the liberal nation of Switzerland, which the government feared was happening when they assumed these women were associating with radical emigres such as Mikhail Bakunin and Peter Lavrov.⁹⁸ Additional concerns by the government include the assumption that women who studied medicine abroad were doing so only because they desired to perform abortions on each other. With this reasoning, the Russian government sought to paint a distinctive picture of Zurich as a venue for radicalism, which threatened to undermine the traditional morals of the conservative

⁹⁶ J. M. Meijer, *Knowledge and Revolution: The Russian Colony in Zurich (1870-1873)* (Assen, Netherlands: Van Gorcum, 1955), p. 155.

⁹⁷ *Pravitel'stvennyi vestnik*, May 21, 1873, p. 1.

⁹⁸ E. O. Likhacheva, *Materialy dlia istorii zhenskogo obrazovaniia v Rossii (1086-1901)*, 6 vols. (St. Petersburg: Stasiulevich, 1893-1901), pp. 559-561; Meijer, *Knowledge and Revolution*, pp. 1, 142; Serafima Panteleeva, "Iz Peterburga v Tsiurikh," in *Pervyi zhenskii kalendar*, 1912, pp. 29-30.

Russian society. This sentiment is echoed in a report commissioned by the government:

"Under its cover, together with demands for sound, basic education for women and the expansion of their sphere of activities, are carried other [demands] which have a utopian, almost revolutionary character: equalization of the rights of a woman with the rights of a man, her participation in politics and even the right to free love, which destroys the very basis of the family and makes a principle of the extreme dissoluteness of morals."⁹⁹

The Russian government's ban was significant in diminishing the resolve of some women to continue their education, as some, including the revolutionary Vera Figner, returned home to join the underground radical movement. However other Russian women sought to circumvent the ban. They did this by ignoring the decree, the effectiveness of which was mostly influenced by their academic advisors, and continuing to study in Zurich, in other Swiss cities such as Bern and Geneva, across Europe or even across the Atlantic in the United States of America. Moreover, the Russian government's efforts to implement the Zurich ban, ironically had the opposite of its intended effect in terms of the number of women engaging in higher education. This is reflected in the increasing figure of women studying in other parts of the world, or engaging in local education programs such as the Bestuzhev courses, which had considerable success, with the number of women studying there increased from 5,549 in 1904/1905 to 44,017 in 1915/1916.¹⁰⁰

⁹⁹ "O imierakh k prekrashcheniiu priliva russkikh zhenshchin v Tsiurikhskii uuiiversitet i politekhnikurn," in TsGIAL, f. 733, op. 191, d. 268, list. 25

¹⁰⁰ Ruth A. Dudgeon, "The Forgotten Minority: Women Students in Imperial Russia, 1872-1917", *Russian History*, 9 (1), (1982) pp 2, 8-9; Tsentral'nyi gosudarstvennyi istoricheskii arkhiv SSSR (TsGIA), f. 1276, op. 11, d. 1362.11. 1-5; "S. Peterburgskie vysshie zhenskie kursy v 1902-1903," ZhMNP, 352 (April 1904), pt. 4, p. 164; LGIA, f. 436, op. 1, d. 14886, 11. 90-93 and d. 14887, 11. 105-10

Chapter Two: Stretching Her Academic Wings: How Some Russian Women Sought Different Avenues to Pursue Higher Education after the Zurich Ban

Following the success of the University of Zurich in producing a growth of higher female education along with the formation of a feminist wave, everything might have been halted after the Russian state, fearing that women studying abroad were becoming radicalised, instituted a ban in 1874 to prevent women who continued to study in Zurich to receive state employment back in Russia. However, women who were influenced by nihilism or feminism, due to the Enlightenment, defied the ban to continue to study in Zurich; elsewhere in Switzerland, such as Bern or Geneva; elsewhere in Europe such as Germany, France and Italy; and even across the Atlantic, in the United States of America. This chapter aims to expand on this feminist wave, which was explained in the previous chapter, to show that women continued to dismantle the structured norms of gender roles in two respects: first by the sheer number of women participating in higher education across Europe and America; and second, by entering and succeeding in an academic environment that traditionally were designated for men. Russian women did this by writing papers, attending conferences, winning prizes, organising expeditions, assessing collections or obtaining employment in either teaching, laboratory or hospital work. Through this wide breadth of activities these women, influenced by nihilism or feminism, formed a core part of the feminist wave. Additionally, I will briefly examine the lives of four non-Russian women who also had a successful academic career. As in the previous chapter, I will show the universality of women's pursuit of higher education, as women all across Europe and America worked together to dismantle structured gender roles as defined by their respective traditional societies.

2.1) In Defiance of the Zurich Ban

As mentioned in the previous chapter, the Zurich Ban in 1874 forced some Russian women to reconsider their priorities and suspend their studies to join the underground revolutionary movement. However, other women chose to defy the ban and continue to study in Zurich. Of note, one of those women, who had a successful but difficult academic career, was Sofia Pereislvatseva, who graduated from Zurich in 1876, after she obtained a doctorate in zoology. Soon after graduating, she was appointed director of the Sevastopol Marine Biological Station in 1880. There, she performed research on the embryonic development of turbellaria (flat-worm), of which her monograph describing her research was the first ever written on this topic.¹⁰¹ As a result of her hard work and research, Pereislvatseva was appointed chair of the Zoological Section at the eighth congress of Russian Naturalists and Physicians in 1889.¹⁰² However, even after achieving success and recognition among her peers, she found it difficult to make a living with her research, often supplementing her income by translating foreign-language articles.¹⁰³ It was only through the generosity of grants from other people that she was able to continue her research at the Naples Zoological Station and later at the *Muséum national d'Histoire naturelle* in Paris, where she stayed for over a year. However, these funds ran out and even after an impassioned plead by botanist Ludwig Rishavi in the city paper *Odesski listrok* "*Without any means for living, earning her slender bread by translations from foreign languages...Sofia continued her work, publishing scientific articles, which gave her a European reputation...I believe it is my duty to inform about Pereislvatseva hard and almost hopeless situation,*"¹⁰⁴ she died, reportedly by her friends from starvation, as the financial aid from the St. Petersburg Academy of Sciences arrived too late.

¹⁰¹ Sofia Pereiaslvtseva, *Monographie des Turbellariés de la Mer Noire* (Odessa: Novorossiiskoe Obshchestvo Estestvoispytatelei, 1892)

¹⁰² L. Ia. Bliakher, "Sofi a Mikhailovna Pereiaslvtseva i ee rol' v razvitii otechestvennoi zoologii i embriologii," *Trudy Instituta istorii estestvoznaniia i tekhniki* 4 (Moscow, 1955): pp. 181-184.

¹⁰³ Ibid, 186.

¹⁰⁴ F. 575, op. 2, d. 14, l. 9, Manuscript Department of the Russian State Library, Moscow.

Aside from Pereislavtseva, other Russian women continued to study in Zurich. These include Serafima Panteleeva, whose research in physiology allowed her the opportunity to work in the laboratory of Tarkhanov¹⁰⁵ in St. Petersburg and Elizaveta Litvinova, whose study in mathematics earned her a masters in Zurich in 1876 and a doctorate in the Swiss city of Bern in 1878, which allowed her the opportunity, after a lengthy delay, as she ran afoul of the Zurich ban, to become the first women to teach in a higher-level boy's gymnasium.¹⁰⁶ As a result of this rare honour, Litvinova, through her excellent teaching, inspired many Russian women to pursue higher education, including the wife of Soviet leader Lenin, Nadezhda Krupskaya.¹⁰⁷ Moreover, even years after the ban at the turn of the century, Russian women continued to study in Zurich. Among these women was Sabina Spielrein, one of the first female psychoanalysts, who graduated from Zurich in 1911, and published thirty five-papers on psychoanalysis, developmental psychology, psycholinguistics and educational psychology throughout her career.¹⁰⁸

Furthermore, in the Swiss city of Geneva, another notable Russian woman, Vera Popova, studied chemistry and in 1892 defended her work on dibenzyl ketone. Popova was credited for classifying the organic compound, which laid the foundation for synthetic acrylic resins being created from acetone cyanohydrin.¹⁰⁹ After her study, Popova returned to Russia and started teaching chemistry in local education programs. Although her academic career showed much promise, she died from a laboratory

¹⁰⁵ Serafima Panteleeva, "Iz Peterburga v Tsiurikh," pp. 29-31

¹⁰⁶ I. G. Zenkevich, "Elizaveta Fedorovna (Ivashkina) Litvinova," *Zenkevich, Sud'ba talanta (Ocherki o zhenshchinakh-matematikakh)* (Briansk: Pedagogicheskoe obshchestvo RFSFR, 1968), pp. 33-37; Ann Hibner Koblitz, "Elizaveta Fedorovna Litvinova," *Women of Mathematics: A Biobibliographic Sourcebook*, ed. Louise Grinstein and Paul Campbell (New York: Greenwood, 1987), pp. 129-134.

¹⁰⁷ Ibid.

¹⁰⁸ John Launer. *Sex versus Survival. The Life and Ideas of Sabina Spielrein*. (London: Bloomsbury Publishing, 2014)

¹⁰⁹ Anne C. Hughes, "Vera Evstaf'evna Bogdanovskaia," Marilyn Ogilvie, Joy Harvey, and Margaret Rossiter (eds.), *Biographical Dictionary of Women in Science: Pioneering Lives from Ancient Times to the Mid-Twentieth Century*. (New York: Routledge, 2014); pg. 153.

explosion at the age of 28, while attempting to synthesise methylidynephosphane.¹¹⁰ Despite her short life, Popova was given a tribute in the *Journal of the Russian Physical Chemical Society*,¹¹¹ in the British journal *Nature*¹¹² and in the American journal *Science*.¹¹³ Evidently, Switzerland with either the cities of Zurich, Bern or Geneva, provided excellent teaching facilities for Russian women, enabling them to pursue an academic career, and therefore build upon the feminist wave of female higher education.

2.2) Heidelberg Women's Commune

Moving from the nation of Switzerland to the city of Heidelberg in Germany, a small but important group of women, who identified as nihilists, started to gather and, in 1869, formed the Heidelberg's Women's Commune, as a means to support each other in their studies. At its peak, the commune consisted of five women: Sofia Kovaleskaya, Julia Lermontova, Anna Eivreinova, Anna Korvin-Krukovskaya and Natalia Armfeldt. However the commune fell apart due to its members' opposing views on how to emancipate Russian women and reform the conservative Russian society. Korvin-Krukovskaya and Armfeldt felt urgency was needed to help Russian women at the current moment, arguing that women could obtain their higher education after emancipation was achieved. As a result, Korvin-Krukovskaya and Armfeldt, left the commune and joined the underground revolutionary movement, while the three of Kovaleskaya, Lermontova and Eivreinova, who remained, pursued higher education around Germany, and as a result became the first Russian women to obtain a doctorate in mathematics, chemistry and law respectively.

¹¹⁰ Marelene Rayner-Canham & Geoffery Rayner-Canham. *Women in Chemistry: Their Changing Roles from Alchemical Times to the Mid-twentieth Century*. (Philadelphia: Chemical Heritage Foundation. 2001), p. 64

¹¹¹ G. Gustavsona. "A few words about Vera Estaf'evna Bogdanovskaia". *Journal of the Russian Physical Chemical Society*. 29 (1897), pp. 147–151.

¹¹² "Obituary". *Nature*. 56 (1441): pg. 132. 16 July 1897.

¹¹³ "Scientific Notes and News". *Science*. 6 (133), pg. 96. 1897.

2.2.1) Sofia Kovaleskaya

The first and perhaps the most famous of this trio was Sofia Kovaleskaya. Born in 1850 in the old capital of Moscow, Kovaleskaya moved to the small town of Pablino to live on her family estate in 1858, after her father, Lieutenant General Vasiliy Korvin-Krukovsky retired from the army. Upon arriving at the estate, the family realised they had not brought enough wallpaper and they did not want to travel to St. Petersburg to buy more. Instead they decided to compromise and use newspaper, since only the nursery (Sofia's room) did not have wallpaper. However, they could not find any newspaper and instead used lectures notes by Russian mathematician Mikhail Ostragoski, which Sofia's father had taken during his youth. These notes, which were cluttered around Sofia's room, fascinated her, developing her strong interest in mathematics, as later in her life, mathematics would become her field of study in the University of Heidelberg and later her profession in the University of Stockholm.

"I remember how, in my childhood, I passed whole hours before that mysterious wall, trying to decipher even a single phrase, and to discover the order in which the sheets ought to follow each other. By dint of prolonged and daily scrutiny, the external aspect of many among these formulae was fairly engraved on my memory, and even the text left a deep trace on my brain, although it was incomprehensible to me."¹¹⁴

This early interest in mathematics would translate to formal study, as Sofia was tutored first by Iosif Malevich in elementary mathematics and later by A. N. Strannoliubskii in calculus, when she lived with her family in St. Petersburg. However, this was not enough for Sofia, who sought to pursue further study in mathematics at a university level. Since Russian universities barred women from study, the only option for her to pursue higher education was to travel abroad. However, this endeavour would not be simple for Sofia, as by Russian law, a woman, even of full legal age, could not travel anywhere without a special type of passport (vid), which was given only to

¹¹⁴ Sofya Kovalevskaya. *Her Recollections of Childhood*, (New York: The Century, 1898), pg. 73.

women who were granted permission to travel by their father, husband or by a state functionary, if they were a widow. In order to circumvent this law, Sofia created a fictitious marriage in 1868 with someone sympathetic to her cause, Vladimir Kovalevsky, who was a young palaeontology student and was one of the early adopters of Darwin's work. However, this marriage was still considered legal and its ceremony was still religious in nature. Reflecting upon this arrangement, Sofia viewed it as a means "to open wide the doors of the science of numbers and space."¹¹⁵ Shortly after her marriage, Sofia travelled to Germany in 1869 to commence her studies.

Under the tutelage of prominent German mathematician Karl Weierstrauss, Sofia produced three theses in 1874 about partial differential equations, elliptical integrals and further improving on Laplace's investigation in the formation of Saturn's rings,¹¹⁶ as part of her overall dissertation to the University of Göttingen. Under the supervision of Weierstrauss, she defended her thesis in absentia, without an oral examination, and managed to obtain a doctorate in mathematics *summa cum laude* (with highest honours),¹¹⁷ and became the first Russian woman to obtain a doctorate in mathematics.

Despite this success, Sofia was not received well by her peers back in Russia, and struggled for the next nine years to obtain a teaching position. However, she patiently continued to study mathematics, hoping that someone would recognise her for her excellent work. Her patience was rewarded in 1883, when a fellow student of Weierstrauss, Gösta Mittag-Leffler, helped Sofia secure a position as *privatdozent*¹¹⁸ at Stockholm University. The following year, after receiving support from French mathematician Charles Hermite, who wrote in a report that "she a rare talent, such a

¹¹⁵ Gösta Mittag-Leffler. *Weierstrass et Sonja Kowalevsky*, *Acta Mathematica*, 39 (1923), pp. 133–198.

¹¹⁶ Sofya Kovalevskaya. "Zur Theorie der partiellen Differentialgleichungen," *Journal für die reine und angewandte Mathematik*, 80 (1875), pp. 1–32;

Sofya Kovalevskaya. "Über die Reduction einer bestimmten Klasse Abel'scher Integrale 3ten Ranges auf elliptische Integrale," *Acta Mathematica*, 4 (1884), pp. 392–414.

Sofya Kovalevskaya. "Zusätze und Bemerkungen zu Laplace's Untersuchung über die Gestalt der Saturnringe," *Astronomische Nachrichten*, 111 (1885), pp. 37–48.

¹¹⁷ Roger Cooke. *The Mathematics of Sonya Kovalevskaya*, Springer-Verlag, 1984.

¹¹⁸ Academic title used in European Universities to someone who has qualifications and ability to teach at university

superior intelligence cause me to wish that, in the interest of mathematical instruction, Stockholm university will enlist Madame Kowalevski's assistance,"¹¹⁹ Sofia was promoted to *professor-extraordinaire* (associate professor) for a five year term. During that time she became editor of prominent mathematical journal *Acta Mathematica* in 1884, and later in 1888 she won the Prix Bordin Prize from the French Academy of Sciences for her work on the question: *Mémoire sur un cas particulier du problème de la rotation d'un corps pesant autour d'un point fixe*. ("On the Problem of the Rotation of a Solid Body about a Fixed Point").¹²⁰ Her work on this question became known as the *Kovaleskaya top* and coupled with her earlier work on the *Cauchy–Kowalevski theorem* in 1875, which was based on one of her thesis submissions, proved that she had made important contributions to the field of mathematics. These contributions were recognised in 1889, when Sofia was appointed to the position of Professor at Stockholm University, and became the first Russian woman to receive such a prestigious position.¹²¹ As a result of this rare honour, Sofia, has received numerous tributes awarded to her, even after her death in 1894.¹²²

2.2.2) Julia Lermontova

The second women from the Heidelberg Women's Commune to remain abroad was Julia Lermontova. Born in the capital of St. Petersburg in 1846, Lermontova, like

¹¹⁹ Pierre Dugac. *Lettres de Charles Hermite à Gösta Mittag-Leffler (1884–1891)*, Cahiers du Séminaire d'Histoire des Mathématiques, 6 (1985), pp. 201, Transcription et annotations par Pierre Dugac.

¹²⁰ Sofja Vasilevna Kovalevskaja. "Mémoire sur un cas particulier du problème de la rotation d'un corps pesant autour d'un point fixe où l'intégration s'effectue à l'aide de fonctions ultraelliptiques du temps," *Imprimerie nationale*, (1894)

¹²¹ Ann Hibner Koblitz. *A convergence of lives: Sofia Kovalevskaja: scientist, writer, revolutionary*. (New Brunswick (New Jersey): Rutgers University Press, 1993)

¹²² Tributes in academia include the *Sonya Kovalevsky High School Mathematics Day*, which is a grant for the Association for Women in Mathematics (AWM), *Sonya Kovalevsky Lecture*, which is intended to highlight significant contributions of women in mathematics, the *Kovalevskaya Fund* which supports women in science in developing countries and the *Sofia Kovalevskaya Award*, which is an award presented by the Alexander Von Humboldt Foundation to promising young researchers. Additional tributes include a lunar crater named after her, an asteroid called 1859 Kovalevskaya also named after her, soviet stamps issued in honour of her 1951, commemorative coin issued also in honour of her in 2000 and three films that are based on her, with two of them in Russian (1956, 1985) and one (1983) in Swedish.

Kovaleskaya, received her education through private tutors. However, even though Lermontova was acquainted with Russian chemist Mendeleev, she was unable to gain admittance to the Petrovskia Agricultural College, to study chemistry. Through another acquaintance with Kovaleskaya, she was able to travel abroad with her to Germany and applied to study chemistry at the University of Heidelberg in 1869. Working initially in Robert Bunsen's laboratory, who was responsible for the development of the Bunsen burner, Lermontova moved to Berlin to work under German chemist August von Hoffman, who gave her permission to attend lectures in organic chemistry. While in Berlin, she published her first paper in 1872 on the structure of the compound diphenin¹²³ in the prominent German scientific journal devoted to chemistry, *Chemische Berichte*, before she published her dissertation a couple of years later. In a striking similarity to Kovaleskaya, Lermontova presented her dissertation to Gottingen University. However she had to perform an oral examination as part of her doctoral requirements, although she passed these requirements and managed to obtain a doctorate in chemistry at Gottingen University *cum magna laude* (with high honour) upon the publication of her dissertation on methylene compounds in 1874.¹²⁴

Upon her return to Russia, she joined the Russian Chemical Society in 1875 upon Mendeleev's recommendation and started her research on the hydrocarbon 1,3-dibromopropane in 1876, which led to the synthesis of glutaric acid.¹²⁵ Lermontova also studied on the synthesis of 2,4,4-trimethyl-2-pentene in 1879¹²⁶ and with Russian chemist Vladimir Markovnikov became the first woman to work in petroleum chemistry, when she investigated the composition of Caucasus petroleum in 1877. Additionally, she was able to work under chemist Alexander Butlerov, whose work involved the hydrocarbon C_nH_{2n} , which, when synthesised, becomes valuable for

¹²³ J. Lermontoff. "Ueber die Zusammensetzung des Diphenins," *Chemische Berichte*, (1872), 5, 230-236.

¹²⁴ J. Lermontoff. "Zur Kenntnis der Methylenverbindungen" Gottingen University (1874)

¹²⁵ J. Lermontoff. "Ueber die Darstellung von Trimethylenbromid," *Justus Liebigs Annalen der Chemie*, (1876), 182, pp. 358-362.

¹²⁶ J. Lermontoff. "Sur l'action de l'iodure de butyle tertiaire sur l'isobutylène en présence d'oxydes métalliques," *St. Pétersb. Ac. (Sci. Bull., 1879)*, 25, pp. 203-209"

industrial production. This process of synthesis became known as the Butlerov–Eltekov–Lermontova reaction.¹²⁷

2.2.3) Anna Eivreinova

The final woman of this trio was Anna Eivreinova. Born in 1844 in St. Petersburg, Eivreinova was the cousin of Lermontova, and unfortunately, unlike Lermontova and Kovaleskaya, Eivreinova was not able to secure passage to Germany with a passport. As a result, against the wishes of her family who wanted her to participate in an arranged marriage, Eivreinova crossed the border illegally with no passport or money and reached Heidelberg in 1869.¹²⁸ After studying law in Heidelberg for three years, she received permission to present a dissertation to Leipzig University. The following year in 1873, she presented her dissertation on the responsibilities of neutral parties in conflict and became the first Russian woman to obtain a doctorate in law.¹²⁹ Upon graduation she devoted herself to the nihilist movement by becoming the founding editor of the literary journal *Severny Vestnik* (Northern Messenger) in 1884, working there for around five years.¹³⁰ However this did not detract from her academic work, as she published numerous articles about the civil code¹³¹ and property law.¹³²

Evidently, each of these women in their respective fields managed to challenge the structural norms in society and contribute to a growing feminist wave of female higher education. Kovaleskaya, Lermontova and Eivreinova achieved this by pursuing higher education, graduating with doctorates and making important contributions in

¹²⁷ Alexander Yu. Rulev & Mikhail G. Voronkov. "Women in chemistry: A life devoted to science". *New Journal of Chemistry*. 37 (12), (2013) doi: 10.1039/c3nj00718a.

¹²⁸ "Евреинова". *Brockhaus and Efron Encyclopaedic Dictionary: In 86 Volumes (82 Volumes and 4 Additional Volumes)*. (St. Petersburg. 1890–1907)

¹²⁹ Anna Eivreinova. "Über die Pflichten der neutralen gegenüber den Kriegsparteien," Leipzig University, 1873.

¹³⁰ "Евреинова". *Brockhaus and Efron Encyclopaedic Dictionary*.

¹³¹ Анна Евреинова. О значении и пределах обычного права при разработке отдельных институтов Гражданского уложения: (Реф. д. чл. Спб. юрид. о-ва, А. М. Евреиновой, долож. в засед. Гражд. отд. 12 февр. 1883) 42 pp.

¹³² Анна Евреинова. По поводу вопроса о праве приобретения земель сельскими обществами в общественную собственность: (Реф., чит. в Моск. юрид. о-ве д. чл. А. Евреиновой. — М.: тип. Ф. Б. Миллера, 1880), 24 pp.

their respective fields, by writing articles, performing experiments, winning awards or teaching at universities. Moreover, these women inspired a generation of Russian women, who later pursued higher education in German universities, by proving that women were capable of contributing to academic fields that traditionally were designated for men.

2.3) Influx into Germany

The contributions of Kovaleskaya, Lermontova and Eivreinova in becoming the first Russian women to graduate with a doctorate in their respective fields had not only inspired a generation of Russian women to follow in their footsteps, but also serve as inspiration for women elsewhere in Europe, including in Germany. This was noted by Rahel Gothein, one of the first German students to graduate from the German Girl's Gymnasium in Karlsruhe, who, in her graduation speech, urged her peers to follow the example presented to them by Kovaleskaya.¹³³ However, despite their success and the inspiration they provided for other Russian and European women, these three women were the exception in female higher education in Germany, as it would take another twenty years before women could officially audit classes in Germany, when quasi-regular auditing commenced in 1892.¹³⁴ As a result, academic Maurer Trude argued that Kovalevskaya, Lermontova and Eivreinova can only be considered pioneers for other Russian woman studying at German universities, and not European women in general¹³⁵ as claimed by academic Ann Hibner Koblitz, who wrote that *"To a large extent, women's higher education in continental Europe was pioneered by this first generation of Russian women. They were the first students in Zürich, Heidelberg, Leipzig, and elsewhere. Theirs were the first doctorates in medicine, chemistry, mathematics, and*

¹³³ M. Birn *Die Anfänge des Frauenstudiums in Deutschland. Das Streben nach Gleichberechtigung von 1869–1918, dargestellt anhand politischer, statistischer und biographischer Zeugnisse* [The Beginnings of Women's Higher Education in Germany. The Struggle for Equality 1869–1918, Presented on the Basis of Political, Statistical and Biographical Sources]. [Heidelberg Universitätsverlag winter, 2015], pg. 102-103.

¹³⁴ Maurer Trude, "Russian Women in German Universities: Pioneers of Female Higher Education?," *Вестник Санкт-Петербургского университета. История.*, 2 (3), (2016) pg. 70.

¹³⁵ Ibid, pp. 79-81.

biology.¹³⁶ However, Trude further argues that if one ignores the three forerunners, as they were not part of the regular auditing at German universities, it was only at Giessen, where a Russian woman became the first woman and paved the way for other European women to obtain a doctorate. At other universities, Russian women were preceded by either German women or other foreigners by at least four years.¹³⁷ Although, I disagree with the exclusion of the three forerunners as pioneers for women attending German universities, what Trude has highlighted is the universality of the pursuit of female higher education in the nineteenth century, as it was not only Russian woman but German and even American women who were also pursuing higher education. This universality is evident in the diversity of the 546 female auditors at Gottingen University between 1896 and 1908, where there were 368 Germans, 96 Americans and 42 Russians.¹³⁸

Moreover, these three Russian women, as previously mentioned, can still be considered to be pioneers for other Russian women to attend German universities, as an influx of them started to pursue higher education in Germany. This is evident in the 290 Russian women, who passed examinations and graduated from there, up to 1918.¹³⁹ In a closer examination of those 290 women, a large majority of them, 84.5% (245), studied medicine,¹⁴⁰ although it must be noted some women also studied chemistry, botany, history and philosophy. This desire to study medicine was reflected in the dominance of Russian women in the corridors of these universities, where in a dissection course in 1901 in the German city of Halle, of the 32 female auditors, 30

¹³⁶ Ann Hibner Koblitz, *Science, Women and Revolution in Russia*, Routledge, 2000, pg. 11.

¹³⁷ Maurer Trude, "Russian Women in German Universities," pg. 81. Sourced from... *Jahresverzeichnis der an den Deutschen Universitäten (from 1913 on: und Technischen Hochschulen) erschienenen Schriften* [Annual List of Dissertations and Publications by German Universities] (JHSS) (from 1913: and Institutes of Technology). Vols 1–34. Berlin, A. Asher & Co, 1887–1918.

¹³⁸ I. Costas & B. Ro. "Pionierinnen gegen die immer noch bestehende Geschlechterhierarchie — die ersten Frauen an der Universität Göttingen" [Female Pioneers Confronting the Persistent Gender Hierarchy - the First Women at the University of Göttingen]. *Feministische Studien* [Feminist studies] (Wien), (2002), vol. 20, pp. 26–27.

¹³⁹ JHSS: 1885/1886 – 1918 (General Archive) & JHSS 1925, p. 247 (see note 37)

¹⁴⁰ Maurer Trude, "Russian Women in German Universities," pg. 72; JHSS: 1885/1886 – 1918. (See note 37)

were Russian,¹⁴¹ while in the capital of Berlin, 58.6% of all women who obtained a doctorate of medicine were Russian, while only 38.7% were German.¹⁴²

The actions of Russian women who attended German universities, demonstrate that Russian women were starting to question the gender roles that perpetuated structured norms in nineteenth century Russian society, contributing to a growing feminist wave in female higher education. However, women involved in this push for female higher education did not just situate themselves in Switzerland or Germany, as nineteenth century Russian women pursued higher education elsewhere, including Paris and Naples, while a few even went to the United States of America to contribute to academic fields that traditionally were designated for men.

2.4) Snapshot of other Russian Women in Higher Education

Moving on to the nation of France, it to had a similar significant presence of Russian women studying at their universities. At the medical school in the University of Paris in 1887, there were 114 women, of whom 70 were Russian, while 12 were French, 20 were Polish and 8 were English, while additionally, there was one women each from the United States of America, Austria, Greece and Turkey.¹⁴³ One Russian woman of note, was Maria Pavlova, who graduated with a doctorate, not in medicine, but in palaeontology, from the *Sorbonne* in 1884. Upon graduation, she worked on ammonite fossils before moving on to study tertiary mammalian fossils, mainly focusing on mammoths. Pavlova then wrote an article entitled *Les Elephants fosils de la Rusie* (The Elephants fossils of Russia) in 1910¹⁴⁴ and in 1914, a larger two-volume

¹⁴¹ H. R. Peter. "Studentinnen aus Russland, die "Kalamitaten" des Frauenstudiums in Halle und ein Experiment des Prof. Roux im Wintersemester 1901" [Female Students from Russia, the "Calamities" of Women's Higher Education in Halle and an Experiment of Professor Roux in the Winter Semester 1901]. *Mitteldeutsches Jahrbuch für Kultur u. Geschichte* [Yearbook for the Culture and History of Central Germany], (2006), vol. 13, pg. 107. (In German)

¹⁴² Maurer Trude, "Russian Women in German Universities," pg. 73; JHSS: 1885/1886 – 1918. (See note 37)

¹⁴³ Caroline Schultze, *Les femmes médecins au XIXe siècle* (Women doctors in the 19th century). (Paris: Ollier-Henry, 1888), pg. 16.

¹⁴⁴ M. V. Pavlova. "Les Éléphants fossiles de la Russie" *Nouveaux Mémoires de la Société impériale des Naturalistes de Moscou*, vol. xvii, pt. ii, pp. 57, 3 plates, (1910)

monograph entitled *Mammifères tertiaires de la nouvelle Russie* (Tertiary mammals of the new Russia). The latter document was co-authored with geologist and palaeontologist Alexei Pavlov.¹⁴⁵ As a result of her hard work, she was recognised alongside Alexei Pavlov, when they were jointly awarded the Albert Gaudry Medal by the French Geological Society in 1926.¹⁴⁶

Another city where women studied was the Italian city of Naples. Of note were the sisters Sofia and Maria Bakunina, who were the daughters of revolutionary and philosopher Mikhail Bakunin, and graduated from the University of Naples with degrees in medicine in 1893 and chemistry in 1895 respectively. Regarding, Sofia, she wrote extensively on the concept of the 'recapitulation theory,' which, although now disproven, refers to the development of an animal's embryo in successive stages through the evolution of an animal's early ancestors. Her works include research on respiration and renal secretion of embryos, published in 1894,¹⁴⁷ and on the evolution of embryonic functions, published in 1895.¹⁴⁸ On the other hand, Maria focused on stereoisomerism, which refers to the study of the arrangement of atoms and molecules and their effect on chemical reactions. This topic became the subject of her first paper, which was published in 1890¹⁴⁹ and her dissertation in 1895.¹⁵⁰ Following graduation, in 1900, Maria won a 1000 lira prize from the University of Naples for her continued extensive research on stereochemistry.¹⁵¹ Later in 1906 she studied the rocks in the

¹⁴⁵ M. V. Pavlova. & A. Pavlov. "Mammifères tertiaires de la nouvelle Russie" Moscou: J.N. Kouchnéreff (1913).

¹⁴⁶ "Lauréats du Prix Albert Gaudry," *Compte rendu sommaire et Bulletin de la Société Géologique de France* 30, s. 4 (1930), pg. 4.

¹⁴⁷ Sofia Bakunin. *Recherches sur la respiration et la sécrétion renale de l'embryon*. Congr. Med. Int., Atti, 3 (Pediatri.) (1894) pp. 56–60.

¹⁴⁸ Sofia Bakunin. *Sur l'évolution des fonctions embryonnaires. Recherches expérimentales*. Arch. Ital. Biol., 23 (1895) pp. 420–23.

¹⁴⁹ Maria Bakunin. *Sugli acidi fenilnitrocinnamici e sui loro isomeri stereometrici*. Gazz. Chim. Ital., 25 (1895), pg. 137–89.

¹⁵⁰ Maria Bakunin. *Sugli acidi meta e paranitro-fenilcinnamici e sopra alcuni loro derivati*. Napoli, Rend., 29 (1890), pg. 104–14

¹⁵¹ Mary. R. Creese *Ladies in the Laboratory IV: Imperial Russia's Women in Science, 1800-1900*, (Maryland: Rowman & Littlefield 2015), pg. 65.

Sicily and Griffoni Valley, following the eruption of Mount Vesuvius and eventually helped create a geological map of Italy.¹⁵²

In addition to the cities around Europe, some Russian women saw the United States of America as a venue that presented them with opportunities to study and work. Of note, one of those women, was Adelaida Lukanina, who studied medicine at the Women's Medical College of Pennsylvania. The reason she studied in America was because she wanted to obtain a medical degree by examination,¹⁵³ which was not available, if she continued to study in Zurich, as the requirement for a degree in Zurich was to only write a dissertation. During her time in America, she worked at the New England Hospital for Women and Children. Another notable Russian woman who travelled to America was Vera Danchakoff, a pioneer in stem-cell research, who travelled to New York City to work at the Rockefeller Institute of Medical Research and later at the Columbia University College of Physicians and Surgeons. Her work remains important today, as noted by academic Marshall Lichtmann, who in 2010 described a lecture Danchakoff gave in 1915 as extraordinary and pioneering, noting *"that the rest of the century has been spent filling in the details of (her) experimental insights!"*¹⁵⁴

The disciplines studied by Russian women in the nineteenth century, including zoology, physiology, mathematics, chemistry, palaeontology, medicine and biology, reveal a diverse snapshot of Russian women's higher education in the nineteenth century. The diversity of their studies was also helped through the variety of cities in Europe and the United States of America in which Russian women pursued higher education.

¹⁵² Maria Bakunin, "L'industria degli scisti itticolici dell' Italia Meridionale," Atti del Reale Istituto d'Incoraggiamento di Napoli 9, series 6 (1911): 215–37;

Marco Ciardi & Miriam Focaccia (2011). Apotheker, Jan; Sarkadi, Livia Simon, eds. Maria Bakunin (1873-1960). *European Women in Chemistry*. (NJ: John Wiley & Sons, 2011).

¹⁵³ Adelaida Lukanina, "God v Amerike. Iz vospominanii zhenshchiny-medika," Vestnik Evropy 16, no. 8 (1881): pp. 661–66; Vestnik Evropy 16, no. 9 (1881): pp. 31–78, Vestnik Evropy 17 no. 4 (1882): pp. 495–538; Vestnik Evropy 17, no. 6 (1882): pp. 503–45.

¹⁵⁴ M. A. Lichtman (October 2001). "The stem cell in the pathogenesis and treatment of myelogenous leukemia: a perspective." *Leukemia*. 15 (10), (October 2010), pp. 1489 – 1494. doi:10.1038/sj.leu.2402247.

Moreover, papers published in the corpus of the Royal Society's Catalogue of Scientific Papers offer a more concrete breakdown of the variety of papers published in each discipline by Russian and Polish authors.¹⁵⁵ Of these papers, 41% were in medical science, while 27% were in chemistry, 11% in zoology, 8% in biology, 6% in geology and 7% in other disciplines.¹⁵⁶ Additionally, from the same corpus, Russian and Polish authors constituted 42% of all authors and 33% of all papers, the highest number from any continental European nation.¹⁵⁷ This figure demonstrates that Russian women led the charge in Europe for female higher education. They did this by publishing academic papers in a range of disciplines, as well as collaborating with foreign institutions, in order to add to the pool of knowledge in their respective fields. As a result, their efforts demonstrated that women were capable of working in academic fields that traditionally were designated for men, disproving the traditional structured understanding of women in nineteenth century Russia and helping to grow the feminist wave in female higher education.

2.5) Academic by Association

Aside from Russian women partaking in formal education abroad to obtain a degree and contribute to academia in a conventional way, some women took a different part to work in academia: through association with men in their lives, who had established academic careers. Though their initial means deviated slightly from those of the women discussed previously, the end result of contributing to the pool of knowledge in their respective academic fields and gaining an independence and self reliance remains the same. I would like to illustrate this through the achievements of

¹⁵⁵ In this resource, Polish scientists are counted together with Russian scientists, since technically during the nineteenth century Poland was part of Russia, whereas today they are both independent nations.

¹⁵⁶ Royal Society London, *Catalogue of Scientific Papers, 1800-1900*, 19 vols., Cambridge: Cambridge University Press, 1867-1925; Mary. R. Creese *Ladies in the Laboratory IV: Imperial Russia's Women in Science, 1800-1900*, pg. 12.

¹⁵⁷ Ibid, pg. 11.

four Russian women: botanist Olga Fedcheko, chemist Anna Volkova, and archaeologists Praskovia Uvarova and Anna Raeskavia.

From the young age of sixteen, Olga Fedchenko was interested in science, which was demonstrated when she created her first collection of preserved plant specimens in 1862. Her hard work at Moscow University led her to accompany her husband to the region of Turkestan, as a member of his research team, where she drew maps, managed accounts and also collected insects and around 1527 plants.¹⁵⁸ Her status on the team was well recognised as noted in a letter by K. P. Von Kaufman to General Abramov, who was commander of the region: *"I propose, dear Sir, to provide any assistance to Mr. Fedchenko and his wife who is also to accompany him as a scientist in a commission given to him."*¹⁵⁹ Despite her contribution, Fedchenko received no salary as part of this expedition. After the expedition she collated and published her findings in a twenty-four issue report, of which the last issue was written by Fedchenko herself.¹⁶⁰

In the field of chemistry, Anna Volkova made some important contributions when she wrote two papers on toluenesulfonic acids and acid amides in 1870.¹⁶¹ She achieved this through the help of scientists in Russia, such as Engelhardt and Mendeleev, and her study at St. Petersburg University. Shortly after, she became the first woman to join the Russian Chemical Society,¹⁶² and was further recognised for her

¹⁵⁸ Ibid, pg. 87.

¹⁵⁹ "Pis'mo Turkestanskogo general-gubernatora K. P. fon Kaufmana k nachal'niku Zeravshanskogo okruga A. K. Abramovu, 1868. October 4." In *A. P. Fedchenko: Sbornik dokumentov* (Tashkent, 1956), pg. 53.

¹⁶⁰ A. P. Fedchenko, E. Regel, A. Bunge, and O. A. Fedchenko. *Puteshestvie v Turkestan* (Travels in Turkestan), 2 vols. (St. Petersburg: Knizhnyi sklad M. Stasiulevichna, 1876–1902, repr. Moscow, 1950), 466 pp.

¹⁶¹ Anna Fedorovna Volkow "Ueber die isomeren Toluosulfosäuren." *Russian Chemical Society Journal*, 2 (1870) 161–75 and *Zeitschrift für Chemie*, 6 (1870) 321–27; Anna Fedorovna Volkow "Ueber die Säuren, welche durch Vertretung des Wasserstoffes in den Amiden der Toluolsulfosäuren durch saure Radicale entstehen." *Russian Chemical Society Journal*, 2 (1870) 243–352; *Zeitschrift für Chemie*, 6 (1870) 577–81.

¹⁶² A. Vucinich, *Science in Russian Culture 1861-1917*, (Stanford University Press, Stanford, CA, 1970), pp. 82, 137.

work when she became the first woman to attend the third Congress of Russian Naturalists and Physicians in Kyiv in 1871.¹⁶³

Regarding archaeology, Praskovia Uvarova developed an interest in it, when she accompanied her husband as an assistant on various scientific excursions. Upon her husband's death in 1885, she was the first honorary elected member in the Moscow Archaeological Society. Through her considerable wealth (she was also a countess), Uvarova led many digs and exhibitions, and even had a prominent role in the preparation of the All-Russian Archaeological Congress at the State Historical Museum. Additionally, she published more than eighty scientific works and edited many more.¹⁶⁴

Similar to Uvarova, Anna Raeskavia also developed an interest in archaeology, when she started to develop a collection that was to be donated to museums and the Academy of Science, after she collaborated with specialists she had met on her travels in Italy. She had also organised archaeological expeditions in St. Petersburg and the Baltic region and as a result became a corresponding member of the Moscow Archaeological Society in 1872, despite objections from its president.¹⁶⁵ Furthermore, she was well regarded among her colleagues, as anthropologist Dmitri Anuchin wrote that *"she was a master-spirit of a woman and had an analytical mind which is so rare among females."*¹⁶⁶ The efforts of these four women demonstrated that Russian

¹⁶³ Marina Loskutova, "Public Science as a Network: The Congresses of Russian Naturalists and Physicians in the 1860s–1910s," *Baltic Journal of European Studies (formerly Proceedings of the Institute for European Studies)* no. 1 (2011), pp. 153–69.

¹⁶⁴ Some of Uvarova's publications include catalogue of artefacts: Uvarova's publications include the following: "Katalog riznitsy Spaso-Preobrazhenskago monastyrja v Yaroslavie" (Catalogue of the sacristy materials in the Spaso-Preobrazhenskii monastery in Jaroslavl) (Moscow: A. I. Mamontov, 1887);

proceeding of congresses: "Trudy v arkheologicheskago siezda v Tiflisie 1881" (Proceedings of the Fifth Archaeological Congress, Tiflis, 1881) (Moscow: A. I. Mamontov, 1887); & archaeology materials: "Materialy po arkheologii Kavkaza, sobrannye ekspeditsiami Imperatorskago Moskovskago Obshchestva" (Material on Caucasus archaeology collected by the Moscow Archaeological Society), ed. Praskovia Uvarova, serial publication, 14 vols. (Moscow: A. I. Mamontov, 1888–1916).

¹⁶⁵ *Imperatorskoe Moskovskoe arkheologicheskoe obshchestvo v pervoe piatidesiatiletie ego sushchestvovaniia (1864–1914 gg.)*, vol. 2 (Moscow, 1915), pp. 297–8.

¹⁶⁶ Dmitrii N. Anuchin, "Anna Mikhailovna Raevskaia," *Izvestiia Obshchestva liubitelei este stvozhnaniia, antropologii i etnographii* 90, no. 3 (*Trudy antropologicheskogo otdela* 18, no. 3 [1896], pg. 513).

women without a formal education could make significant contributions to their chosen academic discipline and help to dismantle the traditional structured gender norms of nineteenth century Russia.

2.6 Foreign Women

In the previous chapter, it was shown that non-Russian women participated in higher education in medicine at the University of Zurich. Likewise, non-Russian women also studied in other countries and went on to have prominent academic careers. Highlighting these non-Russian women shows the universality of women's pursuit of higher education and reveals that Russian women's higher education endeavours did not take place in isolation. Among these women were the Polish-born Chemist Maria Sklodowska, the Finnish Historian Alma Soderhjelm, the Polish anthropologist Cezaria Baudouin de Courtenay and the English physician Sophia Jex-Blake.

Of these four women, the most recognisable was Maria Sklodowska, who won two prizes from the Nobel Committee, the first being in 1903 in physics with her husband Pierre and Physicist Antoine Henri Becquerel for their research on the radiation phenomena¹⁶⁷ and the second in 1911 in chemistry for her discovery of the elements of radium and polonium.¹⁶⁸ Born in Warsaw, Poland in 1867, Sklodowska studied at the University of Paris and graduated with a degree in physics in 1893. With the aid of a fellowship, she was able to obtain a second degree, reportedly in chemistry in 1894.¹⁶⁹ While working with her husband, Pierre, she wrote thirty-two scientific papers, including one about the dangers of radium.¹⁷⁰ Later as recognition of her work, Sklodowska became the first woman to become a professor at the University of Paris

¹⁶⁷ "The Nobel Prize in Physics 1903." The Nobel Foundation. Available online: https://www.nobelprize.org/nobel_prizes/physics/laureates/1903/index.html

¹⁶⁸ "The Nobel Prize in Chemistry 1911." The Nobel Foundation. Available online: https://www.nobelprize.org/nobel_prizes/chemistry/laureates/1911/index.html

¹⁶⁹ Tadeusz Estreicher. "Curie, Maria ze Skłodowskich". *Polski słownik biograficzny, (Polish Biography Dictionary) (1938) vol. 4 (in Polish).* p. 111.

¹⁷⁰ Andra Henderson (ed.) "Marie Skłodowska Curie", *Encyclopedia of World Biography, 2nd ed., vol. 4, (Detroit, Gale Virtual Reference Library, 2004,) pp. 339–41.*

in 1906, following the unfortunate death of her husband, Pierre.¹⁷¹ As a result of her important research, she is still remembered today with Professor L. Pearce Williams, naming the results of the Curies' work in radiation as epoch-making.¹⁷²

Similar to Skłodowska, Soderhjelm studied at the University of Paris, obtaining a doctorate of history in 1900 following the publication of her dissertation on the practice of journalism during the French revolution.¹⁷³ Following her graduation, she was unanimously offered the position of lectureship at Åbo Akademi University, located in the Finnish city of Turku. However, she could not immediately accept the position, as she was worried about her family, due to the political situation in Russia. However, six years later, she accepted the position and became chair of General History at the University, while at the same time, became the first female professor at a Finnish university.¹⁷⁴ Afterwards, while also working at the newspaper Åbo Underrättelser, Soderhjelm continued her research on the French revolution by focusing on correspondence between Marie Antoinette and Axel Von Fersen and other French revolutionaries.

One example of a foreign woman who studied at a Russian university was de Courtenay, who obtained a diploma in 1910 for her dissertation on the language used in a sixteenth century Marian prayer book.¹⁷⁵ As a pioneer of ethnology and one of the first authors to utilise phenomenology in the study of folk culture, de Courtenay obtained a professorship at Stefan Batory University in modern-day Vilnius in 1927 (she had started to lecture there in 1924). During that time, she established an ethnographic museum and held its first exhibition in 1925, which focused on folk

¹⁷¹ Tadeusz Estreicher. "Curie, Maria ze Skłodowskich," pg. 112.

¹⁷² L. Pearce Williams. "Curie, Pierre and Marie". *Encyclopedia Americana*, vol. 8. (Danbury, Connecticut: Grolier, Inc., 1986). p. 332.

¹⁷³ Alma Soderhjelm "Le Régime de la presse pendant la Révolution française" (The regime of the press during the French Revolution) (Helsingfors: Imprimerie Hufvudstadsbladet, 1901).

¹⁷⁴ Czarniawska, Barbara & Sevón, Guje. 'The Thin End of the Wedge: Foreign Women Professors as Double Strangers in Academia', *Gender, Work and Organization*, (2008), 15 (3), p. 264.

¹⁷⁵ Ibid, p. 270.

fabrics.¹⁷⁶ In 1934, as continued recognition of her work, she became the chair of ethnography at Warsaw University, and became the first female professor in a Polish university.

Unlike the other women in this section, Sophia Jex-Blake faced more difficulties in pursuing higher education. This occurred after she was rejected in her application to study medicine at the University of Edinburgh in 1869. As a result, she formed the 'Edinburg Seven' and fought for women's access for medical education. Her actions led the UK to introduce the Medical Act in 1876, which allowed women to be licensed as doctors.¹⁷⁷ Jex-Blake obtained her Medical degree in 1877 from Bern and became the first practicing doctor in Scotland in 1878. Afterwards, in 1886, she helped establish the Edinburgh School of Medicine for Women.¹⁷⁸

Evidently, the efforts of these four women highlight that women pursuing higher education came from a diversity of nationalities. This diversity demonstrates the universality of their pursuit and their common goal to challenge the conventional structured gender norms in the nineteenth century in their traditional societies, as well as showing that the feminist wave in female higher education was not confined to Russia.

¹⁷⁶ Dorothy Zamojska, "Cezaria Anna Baudouin Courtenay-Vasmer-de-Ehrenkreutz Jędrzejewiczowa (1885-1967)," *Science and Higher Education*, (2011) (2/38), pp.15-25.

¹⁷⁷ M. A. Elston. "The Edinburgh Seven" *The Oxford Dictionary of National Biography* (2006)

¹⁷⁸ Edythe Lutzker. *Women Gain a Place in Medicine*. (New York: McGraw Hill, 1969) p. 149.

Chapter Three: Expansion of the Wave: How the Pursuit of Higher Education Abroad Led to a Rise of Feminist Culture and Engagement in Society

The successes achieved by Russian women in foreign universities, as described in the preceding two chapters, helped establish a generation of women, both Russian and foreign, who sought to reject conventional gender norms through the pursuit of higher education. These women launched successful academic careers, in which they performed experiments, wrote papers, conducted field work or expeditions and taught. In addition to these women's personal motivation to achieve social and economic independence, female access to higher education had a major impact on Russian society. Through their actions in performing a role that were traditionally designated for men and their sheer numbers in the foreign university corridors, these women transformed Russian society, in a manner that can be described as a feminist wave. This chapter aims to expand on this argument by focusing on several aspects of the feminist wave in nineteenth century Russia. The first part of this argument concerns with nihilism, and will focus on the creation of the nihilist persona and its impact on radicalism. The second part of this argument concerns with feminism, and will focus on the rising feminist culture inside Russia, with people aiming to work within the government and societal frameworks to emancipate women. Moreover, I will briefly explore other occurrences around the world at the time, to show that this feminist wave was not confined to Russia.

3.1) Origins and Growth of Nihilism

The first aspect of this wave constituted of the initial nihilist influence, which was made possible by a group known as the *raznochintsy*, who were a newly-promoted group of noble men, not familiar with the rules of courtship, had difficulty integrating into Russia's court culture.¹⁷⁹ The *raznochintsy* were often struck with an intense level of shyness that rendered them unable to speak to a gentry woman, even if they so desired. Specifically the *raznochintsy* were the sons of priests, bureaucrats and merchants, and included men such as the literary critic Nikolai Dobrolyubov, who wrote poems that displayed his hostile attitude to autocracy, author Nikolai Chernyshevski, who wrote the famous nihilist novel "What's to be Done" while in prison, and journalist Vissarion Belinsky, who was the editor of the Russian journals *Sovremennik* (The Contemporary) and *Otechestvennye Zapiski* (Annals of the Fatherland). Although originally ridiculed for their uncouth behaviour, they later found support with those in the noble circle such as poet Nikolai Nekrasov, who wrote a poem called *zastenchivost* (shyness) in 1852 and Peter Kropotkin, who decided to stop attending society parties, in order to display his support.¹⁸⁰ It is through this support, that the *raznochintsy* became valued as a model of a new type of Russian person, who rejected the court culture, which many people believed led to the perpetuation of inequality between men and women, as women often were valued only for their marriageability and their role to bear and care for children. Instead, the *raznochintsy*, who formed part of the Russian intelligentsia in the nineteenth century, helped to lead Russia into an era of gender equality.¹⁸¹ Evidently, the importance of the *raznochintsy* cannot be understated, as if it was not for these men, the nihilist culture that arose from the women question that enabled women to travel abroad to receive higher education, might not have been possible.

¹⁷⁹ Wilson. "Radical Chastity: The Politics of Abstinence," pg. 11.

¹⁸⁰ Irina Paperno *Chernyshevski and the Age of Realism: A Study in the Semiotics of Behaviour*. (Palo Alto: Stanford University Press, 1998), pg. 87.

¹⁸¹ Wilson. "Radical Chastity: The Politics of Abstinence," pg. 66.

The growth of this nihilist culture occurred, when a group of women, known as the *niglitski*, from the eighteen sixties onwards, who were inspired by the new movement of Russian intelligentsia established by the *raznochintsy*, decided to pursue higher education initially in Russia and later abroad. This inspiration, led these women, through a strong affirmation of their nihilist beliefs, to adopt a new persona, which consisted of the dramatic alteration of their physical appearance, mannerisms and attitude towards sex. In terms of physical appearance, this persona consisted of women wearing short cropped hair, a simple black dress and jumper and blue tinted glasses. Moreover, this persona would enable them to sometimes travel unescorted, use the informal pronoun *ty* (ты) when referring to their male colleagues, smoke cigarettes, discuss social issues such as cruelty of marriage or the exploitation of labour, refrain from sex and practice asceticism, which was a total rejection of physical comfort and pleasure.¹⁸²

One particular aspect, specifically the sublimation of sex and practice of asceticism, carried a much higher importance in the adoption of the nihilist persona, as according to academic Jennifer Wilson, asceticism was inextricably tied to women's liberation in Russia in the nineteenth century¹⁸³ and could be seen as an expression of progressive politics. Furthermore, asceticism could also be seen as an important practice for an individual nihilist girl's journey, as Wilson also argued that *"the freedom that chastity provided from marriage and children allowed women the opportunity to pursue higher education, a career and social independence."*¹⁸⁴ However, asceticism was sometimes viewed as extreme, with perceived transgressions led to being shunned by others in the movement. For example, one woman angered the rest of her group when

¹⁸² Peter C. Pozefsky. "Love, Science, and Politics," pg. 361;

Ann Hibner Koblitz. "Science, Women, and the Russian Intelligentsia," pg. 215;

Thomas Neville Bonner. "Rendezvous in Zurich: Seven Who Made a Revolution in Women's Medical Education, 1864-1874." *Journal of the History of Medicine and Allied Sciences* 44, no. 1, (1989), pg. 24.

Irina Paperno *Chernyshevski and the Age of Realism*, pg. 18. (This description of the *niglitski* is found in the conservative paper *Newsworld West*, 1864).

¹⁸³ Jennifer Wilson. "Radical Chastity: The Politics of Abstinence in Late Nineteenth Century Russian Literature." (Princeton University, 2014), 81.

¹⁸⁴ *Ibid*, pg. 77.

she “committed the crime of a love marriage,”¹⁸⁵ while another woman was deemed bourgeois after she indulged in raspberries with cream.

“I love raspberries with cream,’ the daughter of Bardin the landowner of Tambovsky carelessly admitted once, disgracing herself as a member of the Fritsch Circle. Vera Liubatovich from then on considered Bardin bourgeois.”¹⁸⁶

While the nihilist girl persona is portrayed in a positive light, as slowly enacting change in a conservative society, not everyone shared this outlook. For example Ivan Turgenev, who popularised the term nihilism in his novel “*Fathers and Sons*,” labelled these nihilists as mindless iconoclasts who sought to destroy the fragile institutions of the Russian traditionalist society only for the mere pleasure of creating a shock among the elders of society.¹⁸⁷ Additionally, they were portrayed negatively by Valerian Smirnov in the journal *Vpered (Forward)*, who accused those nihilist women who travelled to Zurich to study, of spreading gossip, inciting romantic intrigues and breaking out in hysterical fits.¹⁸⁸ Moreover nihilist women were portrayed as nothing more than mere prostitutes by the local Zurich population, and as result were often discriminated against in finding accommodation, as well as being ridiculed in the shops and markets.¹⁸⁹

However, the determination of Russia’s nihilist girls, along with the help of the *raznochintsy*, contributed to the rejection of the structured norms visible in traditional Russian gender roles that saw women as only wives and mothers. Their efforts inspired a generation of Russian women, in an early wave of feminism, to pursue higher education abroad across Europe and America, helping to lead Russia into a new era of gender equality.

¹⁸⁵ Engel, Barbara Alpern. *Mothers and Daughters: Women of the Intelligentsia in Nineteenth-Century Russia*. (Cambridge: Cambridge University Press, 1983), pg. 54.

¹⁸⁶ Figner, Vera. *Studenchiskie gody*. Moscow: Golos Truda, (1924), pp. 97-98.

¹⁸⁷ D. I. Pisarev. “Bazarov,” *Sochineniia* (Contemporary), Moscow: Gosudarstvennoe izdatel'stvo Khudozhestvennoi literatury, Volume 2. (1955), pp. 7-50.

¹⁸⁸ Valerian Smirnov, “Revolutsionery iz privilegirovannyh sredy,” (1874), in *Vpered!* Vol. 2. Edited by C.H. Van Schooneveld. The Hague: Mouton (In cooperation with Europe Printing), 1969, 143.

¹⁸⁹ Meijer, *Knowledge and Revolution*, pp. 56-61.

3.2) Nihilism within Radicalism

Nihilism, including the practice of asceticism, influenced Russian women to attempt to achieve a vision of an equal society through the pursuit of higher education. In addition, nihilism influenced women through other means. This included the adoption of radicalism, which through the use of force, advocated a different path to restructure nineteenth century Russian society. Although, one might assume women did not participate in revolutionary activities, there is evidence to the contrary as according to Russian historian and revolutionary Amfiteatrov, approximately 25% of all revolutionaries were women in 1905,¹⁹⁰ while according to earlier police statistics from 1872 to 1877 approximately 242 (15%) women of 1611 were regarded as revolutionary propagandists.¹⁹¹ Examples of radical women included Russia's first female recipient of doctorate in medicine, Nadezhda Suslova who participated in a demonstration regarding the new university regulations before she left for Zurich; Alexandra Sevastianova, who participated in a bomb plot against the governor-general of Moscow,¹⁹² Ekaterina Izmailovich, who shot the governor of Minsk,¹⁹³ and Sofia Khrenkova, who immolated herself after receiving a four-year jail sentence for possession of bombs.¹⁹⁴

As is evident in Khrenkova's self-immolation, extreme actions to the point of suicide were seen as acceptable in the radicals' revolutionary pursuit to overthrow the current political regime. This extreme devotion by the radicals to their cause is further echoed by Sergeev Nechayev's *Revolutionary Catechism*, published in 1869. Nechayev utilised the nihilist girl's persona, including the practice of asceticism to instruct women and men in how to conduct their lives as an ideal revolutionary. Russian philosopher

¹⁹⁰ F. W. Halle, *Women in Soviet Russia* (London: Routledge, 1933) pg. 46.

¹⁹¹ M. N. Gernet, *Istoriia tsarskoi tiurny* (Moscow: Gos. izd. iuridicheskoi literatury, 1951-1952), Vol. III, 95-96.0

¹⁹² *Katorga i ssylka*, (Moscow: Obshchestvo, 1924), no. 8, 236-237.

¹⁹³ I. Steinberg, *Spiridonova, Revolutionary Terrorist* (Methuen Books: London, 1935)

¹⁹⁴ *Katorga i ssylka* (Moscow: Obshchestvo, 1924), no.8. 238-239.

Nikolai Berdyaev explains the importance of Nechayev's manifesto in shaping the beliefs of those in the radical movement:

"The revolutionary must have no interest, no business, no personal feelings and connections; he must have nothing of his own, not even a name. Everything is to be swallowed up by the single exclusive interest, by the one idea, the one passion—revolution."¹⁹⁵

As noted above, the ideal revolutionary should have no personal connections that could detract them from their single revolutionary pursuit. This sentiment is expanded upon in paragraph six of his catechism where he instructs the revolutionary *"to suppress all the gentle and enervating sentiments of kinship, love, friendship, gratitude, and even honour and give place to the cold and single-minded passion for revolution, and that the only one pleasure, satisfaction, consolation and reward, and that is the success of the revolution."*¹⁹⁶ Moreover, in paragraph thirteen, Nechayev warns of the consequences if one does establish personal connections, *"All the worse for him if he has in that world any relations with parents, friends, or lovers, he is no longer a revolutionary if he is swayed by these relationships."*¹⁹⁷ Evidently, these radicals offered a different approach to utilising nihilism, creating a model of an ideal revolutionary person who would help restructure society. This is further evident in the significant number of women who participated in revolutionary activities, especially those who chose to study abroad. Therefore, the actions of these women in the revolutionary underground movement can therefore be viewed as an expansion of the feminist wave of female higher education.

¹⁹⁵ Nikolai Berdyaev. *The Russian Idea*. Trans. by R.M. French, (Hudson: Lindisfarne Press, 1992), pg. 135.

¹⁹⁶ Sergey Nechaev. *Revolutionary Catechism* (1869) Trans. Alan Kimball. Available Online: <https://pages.uoregon.edu/kimball/Nqv.catechism.thm.htm>

¹⁹⁷ Ibid.

3.3) Convergence of Nihilism and Radicalism: Vera Figner

The previous sections regarding nihilism and radicalism display how much the two ideologies intertwined to expand on the core part of the feminist wave in female higher education. Another example of the close interaction between nihilism and radicalism, which influenced women to either study medicine at the University of Zurich or participate in the underground radical movement is the life of revolutionary figure Vera Figner, who is best known for her role in the assassination of Tsar Alexander II. Born in Kazan in 1852, Figner from an early age was influenced by her school headmistress in devoting herself to improving her mind as opposed to focusing on her physical appearance.

"The headmistress of the institute was an old, serious, kind woman, who believed education should tend only to the mind. Under her tutelage, the morals of the schoolgirls changed completely...Under the direction of the new headmistress, the cult of beauty and graces ended abruptly. The schoolgirls stopped paying attention to their appearance and graduated practically as Puritans."¹⁹⁸

As Figner grew older, her focus on her intellect as opposed to her appearance grew stronger as she became influenced by the growing nihilist literature at the time, especially the character of Rakhmetov in Chernyshevki's *"What's To Be Done?"* As a result of this influence, Figner declared herself a nihilist and travelled to Zurich like many of her nihilist sisters to devote herself to the study of medicine *"I was possessed by one idea – to give myself entirely to the study of medicine...I was nineteen years old, but I intended to renounce all pleasures and amusements, even the most innocent ones, in order to lose not a minute of time."*¹⁹⁹ While in Zurich she valued the meaning of achieving her diploma, as she and many other Russian women who pursued higher

¹⁹⁸ Vera Figner. *Запечатленный труд: воспоминания в двух томах*, (Moskva: Mysl', 1964.), Volume 1, 141.

¹⁹⁹ Meijer, *Knowledge and Revolution*, pg. 48.

education at the University of Zurich, believed it would lead them to social and economic independence.

"Suddenly I realized that the diploma, that piece of paper of which I'd been so scornful, was in fact precious to me...It would signify official recognition of my knowledge, evidence that I'd finished what I'd started, achieved the single, absolutely fixed goal I had pursued for so many years with such energy, constancy and self-discipline."²⁰⁰

However, due to increased social instability that was occurring in Russia and, despite lauding the value of a diploma, Figner left Zurich to return to Russia, to perform a major role in the revolutionary underground movement. At this point her belief in nihilism was absolute, with Figner declaring that asceticism was a necessary requirement for everyone.²⁰¹ To this end, Figner argued that anyone who was interested in transforming the country must hold the strong nihilist belief to the point where they must accept that they could live in deplorable conditions, be subject to imprisonment, which Figner was confined for twenty years, and be tempted in a way that could compromise his or her mission.²⁰² Evidently, Figner's life is an excellent example of the convergence of nihilism and radicalism, as she relied upon both aspects in different stages of her life.

3.4) Feminism

The second aspect of this wave constituted of the feminist movement inside Russia. Unlike their nihilist and radical sisters, Russian feminists were more moderate and accommodating to the current legal and social frameworks that were in Russia. Nevertheless they still desired for the emancipation of women from inequalities associated within the nineteenth century conservative society, with the hope it would grant them social and economic independence. As a result, this feminist movement

²⁰⁰ Vera Figner, *Polnoe sobranie sochinenii*, Vol. V, 142-143.

²⁰¹ Paperno, pg. 97.

²⁰² Wilson. "Radical Chastity: The Politics of Abstinence," pg. 65.

sought out different ways to achieve these means, including establishing organisations to provide accommodation, education and employment for women from non-noble backgrounds and through petitioning the government to allow women to participate in university courses in Russia.

Much like their nihilist and radical sisters, feminists also developed their own literature to argue for the emancipation of women and provide an atmosphere conducive to women's social and economic independence. However, Russian feminists differed from nihilists and radicals, in arguing that the traditional family network, which was a core argument used by the detractors of female emancipation in the conservative society, would not be abandoned or destroyed, but instead be strengthened by gender equality. This accommodation to those in the conservative circle was echoed by Maria Vernadskaya who, while as a co-editor of a journal called the Economic Index, wrote several articles that stressed the importance of allowing women in paid labour, in order for them to gain independence. Vernadskaya further stressed that paid labour would not get in the way of motherhood stating that women who did not work wasted their days away gallivanting about without a care in the world: "*Mesdames. Cease to be children. Try to stand on your own two feet*"²⁰³ Furthermore, in another feminist article in the journal *Sovremennik (The Contemporary)* titled "*Women: Their Education and Significance in the Family and Society*," Mikhail Mikhailov critiqued the traditional social structures, arguing that flaws assumed in women were not innate but socially constructed. The only way to prove this theory, Mikhailov argued, was to allow women to have the same rights to men in regard to education and work. However, like Vernadskaya, Mikhailov accommodated those who disagreed with his ideas, stressing that if men were willing to give up their power and treat women as equals, then the family unit would become more durable.²⁰⁴

²⁰³ Maria Vernadskaya. *Sobranie Sochinenii*. (St. Petersburg, 1862), pp. 99-103, 113-115, 136.

²⁰⁴ M. M. Mikhailov. "Zhenschenii ikh vospitanie i znachenie v seme obschestve" *Sovremennik* (April, May, August 1860)

Irina Iukina. "First-wave women's movement" in *Saarinen, Aino, Ekonen, K & Uspenskaia, V. Women and Transformation in Russia*. (London: Routledge, 2013) pp. 31-43;

This accommodation proved useful to the Russian feminists, as they became successful in establishing cooperatives or groups that would help women become socially and economic independent. However, Russian feminists' efforts proved more difficult to achieve than the goals of their nihilist and radical sisters, who did not have to appease Russian conservatives because they intended to change the entire social structure, rather than just reform it. Nevertheless, several cooperatives are worth mentioning. These include the Sunday School Movement, the Society for Inexpensive Lodgings and the accompanying Publishing Artel and the proposed Society for Women's Work. All of these cooperatives denoted an intention to help women within the societal frameworks. Ultimately, Russian feminists would succeed in this endeavour through their pursuit of higher education for women inside Russia, as well as the establishment of local education programs.

Among the first organisations established by Russian feminists were the Sunday Schools. Established in 1859 by Professor Pavlov at Kyiv University, the Sunday Schools quickly spread across Russia to provide education to lower-class women, which otherwise would have been difficult to obtain. Lessons taught in the Sunday Schools included religion, literacy, drawing, numeracy and sewing, while occasionally students also watched plays, listened to concerts and danced.²⁰⁵ As a result, the Sunday Schools, which grew quickly in popularity, became the first opportunity for Russian women to become independent, as one student noted that it *"was the first outlet for our aspirations of work, for the public good and for contacts with the people."*²⁰⁶ However this popularity was short-lived, as the cooperative was shut down in 1862, when a government decree banned the Sunday Schools, following revelations the school's younger teachers were either nihilists or radicals.²⁰⁷ Nevertheless, despite their short lifespan, the Sunday Schools still proved to be a success, as just before their closure,

²⁰⁵ Reginald Zelnik, "The Sunday-School Movement in Russia, 1859-1862," *Journal of Modern History* XXXVII (Jun. 1965), pp. R151-170.

²⁰⁶ Daniel Brower, *Training the Nihilists* (Ithaca, 1975), p. 213.

²⁰⁷ Osip Rabinovich & Joachin Tarnopol. *Razvest VIII* (Aug. 1860), pg. 13-22; P. N. Milyukov *Ocherki po istorii russkoj kultury II*, (Moscow: 1971), pg. 181; Meijer, *Knowledge and Revolution*, pg. 16

there were reportedly 500 schools in operation,²⁰⁸ with one school under the guidance of the daughter of a government official, M. S. Shiplevskaya,²⁰⁹ had enrolled approximately 200 wives and daughters of factory workers.

One particular Sunday School opened by feminist Nadezhda Stasova, also contributed to the founding of the Society of Inexpensive Lodgings in 1859, which was formally chartered two years later in 1861, with the help of two other notable feminists, Anna Filosofova and Maria Trubnikova. The purpose of this cooperative was to provide decent accommodation for women in lower-class Russian society, who were mainly widows or abandoned wives of artisans and bureaucrats living in the capital of St. Petersburg, in order to help them become self-sustaining without offending their sense of dignity. In addition to providing a space to live, the feminists also provided a communal kitchen, a day-care for children and a school for working mothers.²¹⁰ Furthermore, the Society also provided a sewing workshop as a basic form of employment after obtaining a large contract from the military. This endeavour to help women in this Society to obtain employment were moderately successful, as by the year 1900, approximately 40,000 employment opportunities were provided for women, with around 600 women employed in that year alone.²¹¹

Another cooperative set up by the triumvirate of Filosofova, Trubnikova and Stasova was the Women's Publishing Artel, which was established in 1863. Similar to the sewing workshops in the Society for Inexpensive Lodgings, this cooperative provided women with an opportunity to gain employment and become self-sufficient. Specifically, the cooperative copied, wrote, edited, translated and published children's books, scientific literature, poetry and other books about women's issues.²¹² Similarly

²⁰⁸ Richard Stites. *The Women's Liberation Movement in Russia: Feminism, Nihilism, and Bolshevism, 1860-1930*, (Princeton University Press, 1978.), pg. 72.

²⁰⁹ Reginald Zelnik, "The Sunday-School Movement in Russia, 1859-1862," pp. 151-170.

²¹⁰ Barbara Alpern Engel, *Mothers and Daughters: Women of the Intelligentsia in Nineteenth-Century Russia* (Illinois: North-western University Press, 1983), pp. 58-59;

Irina lukina. "First-wave women's movement," pp. 31-43;

Vladimir Stasov. *Nadezhda Vasil'evna Stasova: Vospominaniia i ocherki*. (St. Petersburg, 1899), pg. 67.

²¹¹ Ruth Dudgeon, "Women and Higher Education in Russia 1855-1905" (PhD, George Washington University, 1975), pg. 43.

²¹² Irina lukina. "First-wave women's movement," pp. 31-43;

to the Society of Inexpensive Lodgings, the cooperative proved to be successful, as it helped women to sell books and divide their profits they received among its members or to reinvest it back into the cooperative. Evidently, the Publishing Artel enabled women to become independent, as noted by one of its founding members Stasova who said that the Artel provided "*the idea of uplifting women in the eyes of society to an appropriate level.*"²¹³ As one can see, these two cooperatives or groups became the cornerstone of the feminist movement that enabled the triumvirate of Filosofova, Trubnikova and Stasova, to establish higher education programs for women within Russia and help expand on the feminist wave of female higher education.

Another cooperative worth mentioning, although it was not successful, was the Society for Women's Work. Born from the cooperation between Petr Lavrov and Anna Engelhardt, the Society was intended to function as an employment agency that helped women to be open to new fields of work, train them in important skills and tradecraft, and support them in times of unemployment.²¹⁴ The cooperation between Lavrov and Engelhardt was indicative of the shared goal that many Russian men and women aspired to help women become independent. However, although the Society received government approval in 1865, a schism arose between the feminists and nihilists members. This occurred when the nihilists disapproved of the appointment of Countess Rostovtseva as president of the group, as she was the wife of a Decembrist turned-informer in 1825. Attempts to heal the rift proved fruitless and the society was forced to be abandoned. Fortunately, for the feminists, they established similar cooperatives for women to gain employment, of which include the Society for Helping Needy Women which was located in St. Petersburg; the Society for Circulating Useful Books and the Society for Stimulating a Love for Work, both of which were located in Moscow.²¹⁵

Richard Stites. *The Women's Liberation Movement in Russia*, pg. 69;

Vladimir Stasov. *Nadezhda Vasil'evna Stasova*, pp. 118-146.

²¹³ Ibid, pg. 129.

²¹⁴ "Proekt ustava Obschestva Zhenskavo Truda," *RS*, VI (April 1864) pp. 57-62.

²¹⁵ Vladimir Stasov. *Nadezhda Vasil'evna Stasova*, pp. 68-69;

As seen above, these cooperatives were helpful in assisting some of the poorest people in the country to become socially and economically independent through employment, accommodation and education. However it was the efforts of the triumvirate of Stasova, Filosofova and Trubnikova to pursue higher education of Russian women within Russia that continued to expand on the feminist wave of female higher education. The first action to push for female higher education inside Russia started in 1868, when 178 women signed a petition to the rector of the St. Petersburg University, K. F. Kessler, requesting that the university admit women, arguing that doing so “*will enrich our society with many useful members and our families with more competent mothers and teachers.*”²¹⁶ This original petition evolved into a larger petition, of four hundred signatures, which was sent to the Ministry of Education with the aim of allowing women not only to study at universities but also to teach.

“Our aim: to raise the level of women’s education in general and, at the same time, to give several capable persons the opportunity to acquire the level of erudition necessary for the occupation of the position of teacher in women’s higher educational institutions.”²¹⁷

However, the Minister of Education, Dmitri Tolstoi, was not impressed with their petition, scoffing that those who supported them “*[were] all sheep! You are the leaders [to the organisers of the petition], but it’s all the same to them what or where to go – it’s fashionable, that’s all.*”²¹⁸ Nevertheless, the Minister acquiesced a bit and allowed women to attend public lectures. This action became an important step for women towards greater equality in education. As a result of the Minister’s approval, these public lectures became successful, with women making up over 85% of 900 in attendance at the first lecture in 1870.²¹⁹

E. A. Shtakenshneider. *Dnevnik i zapiski (1854-1866)* ed. I. N. Rozanov (Moscow and Leningrad, 1932), pp. 239-256.

²¹⁶ St. Petersburg Women to K. F. Kessler (11 May 1868) in LGIA, f. 14, O. I, d. 6623. II. pp. 17-32.

²¹⁷ Ibid (13 May 1868) II. pp, 10-11.

²¹⁸ Vladimir Stasov. *Nadezhda Vasil'evna Stasova*, pp. 182-3.

²¹⁹ Likhacheva. *Materially dlya istorii*, pp. 520, 593-594;

In addition to these earlier petitions, Solodovnikova forwarded another petition to the Minister, asking that women be allowed to sit in a university preparatory course, which would act as the first step for female education inside Russia. The government approved her petition and the Alarchin Courses (named after the bridge) were opened in St. Petersburg in April 1869. These courses taught language, geography, geometry, algebra, physics, pedagogy, botany and zoology.²²⁰ Soon after, this time in Moscow, a similar program called the Lublanski Courses (named after the street) was opened. Additional courses were established in 1872, which included midwifery programs that were created at the Medical-Surgery Academy in St. Petersburg because of a petition by the Minister of War, Dmitri Milutin, to Tsar Alexander II and a generous donation of 50,000 roubles from a wealthy patron.²²¹

All of these programs would soon culminate into the establishment of Higher Courses for Women in 1878, which in St. Petersburg were called the Bestuzhev Courses, named after their founder and professor of history Konstantin Bestuzhev-Ryumin, which would provide higher education for women of all social classes. These Bestuzhev Courses, which according to some, including Engel, were called a university for women,²²² became pivotal for the promotion of female higher education in Russia. Furthermore, these courses had been made possible due to increased feminist sentiment that called for equality of education and the fear that if the Russian government did not provide courses for women, then more would travel abroad to places like Zurich and become influenced with revolutionary ideas and a nihilist sentiment to overthrow the current political regime. Specifically, these courses had two

Christine Johanson. *Women's Struggle for Higher Education in Russia, (1855-1900)*. (McGill-Queen's Press-MQUP, 1987), pp. 33-43.

²²⁰ E. Likhacheva. *Materially dlya istorii zhenskavo obrazovaniia v Rossii, 1856-1880*. (St. Petersburg, 1901), pp. 514-518;

Barbara Alpern Engel "Mothers and Daughters," pp. 60-61.

²²¹ "Doklad po Glavnomu voenno-meditsinskomu upravleniiu o kapitale na uchrezhdenie kursov" (March 2, 1872) in *Trudy Vysochaishe uchrezhdennoi komissii po voprosu o zhenskom obrazovanii*, pt 1, pp. 3-5;

"Otnoshenie voennago ministra k Ministru vnutrennikh del" (June 12, 1872) in *Trudy Vysochaishe uchrezhdennoi komissii po voprosu o zhenskom obrazovanii*, pt 1, pg. 10.

²²² Barbara Alpern Engel "Mothers and Daughters," pp. 61.

faculties, History-Philology and Mathematics-Natural Science, and featured some of the best professors in Russia, including the historian Konstantin Bestuzhev-Ryumin, physiologist Ivan Sechenov and folklorist Orest Miller. As a result of this pedigree, the Bestuzhev Courses remained popular, especially during the period after 1881, following the assassination of Alexander II and the reign of the reactionary tsar Alexander III, who closed several other female education programs. This popularity is illustrated by the fact that by 1889, there were only 242 women in these courses after a decline from previous years, however this number rose sharply to 3,393 in 1906 and again to 44,000 women in all higher education institutions in Russia in 1915/1916.²²³

The success of these local education programs while considerable had its issues, as the government provided nominal funding for these programs, and therefore required its students to pay a considerable course fee of fifty roubles. As a result of this fee, some women from non-noble backgrounds faced difficult living conditions. These include some women having to stay up overnight to transcribe documents because there were not enough beds in their rooms,²²⁴ while others had poor eating habits, as they subsisted only on black bread, sausage and tea. Furthermore, as a consequence of their poor eating habits, of the eighty-nine students enrolled at the Learned Midwives courses in 1872, twelve unfortunately died from starvation, while one student, who was the daughter of a soldier, died during her final examination in 1876.²²⁵ As a result of these issues, a cooperative was established in 1883 called The Society for Providing Means of Support for the Higher Education Women's Courses, which sought to help women with tuition and other living expenses.²²⁶

²²³ "S. Peterburgskie vysshie zhenskie kursy v 1902-1903," ZhMNP, 352 (April 1904), pt. 4, p. 164; LGIA, f. 436, op. 1, d. 14886, 11. 90-93 and d. 14887, 11. 105-106.

²²⁴ Christine Johanson. *Women's Struggle for Higher Education in Russia*, pg. 64.

²²⁵ Vrach, No. 35 (1880), 570;

E.S. Nekrasova, "Zhenskie vrachebnye kursy v Petersburge," Vestnik Evropy (Dec., 1882) pp. 834-836, 841.

Barbara Alpern Engel. *Women in Russia, 1700-2000*. (Cambridge University Press, 2004), pg. 79.

²²⁶ S. N. Valk. *Sankt Peterburgskie vyssie zhenskie (bestuzhevskie) kursy (1876-1918): sbornik statei* (Leningrad, 1965) 7, 10, 16, 30-73, 167-172.

The efforts of Russian feminists, through their support for Russian women's access to higher education points to a growing feminist wave of female higher education. Moreover, it must be acknowledged that because of the women who travelled abroad for study, which made the government nervous about them becoming radicalised, the Russian feminists' efforts to establish these local education programs was made possible. It was therefore the actions of both sets of women, those who travelled abroad and those who stayed inside Russia that allowed for the formation, growth and actual success of the feminist wave of female higher education.

Furthermore, this wave had an impact on the first-wave feminism within Russia. This was possible through the creation of groups such as the League for Women's Equality in 1907, which sought to pursue equal rights through education and philanthropy;²²⁷ the holding of conferences such as the first All-Russian Women's Congress in 1908, which had over 1,000 delegates and passed over twenty resolutions related to protection and insurance of women's workers;²²⁸ and the petitioning of women's rights in issues such as women's suffrage, which occurred after a 40,000 person march on the Tauride Palace, and subsequently was approved by the short-lived provisional government in 1917.²²⁹

3.5) Foreign Wave

The pursuit of higher education abroad became a core part of the feminist wave of female higher education inside Russia during the nineteenth century. Additionally, this wave was expanded inside Russia to include women who vowed to help their fellow sisters through cooperatives and the pursuit of higher education at home. However, the expansion of this feminist wave was not confined to Russia, as other

²²⁷ Rochelle Goldberg Ruthchild. League for Women's Equal Rights (1907-1917). In Noonan, Norma C. & Nechemias, Carol Encyclopaedia of Russia's Women's Movement. (Connecticut: Greenwood Publishing Group, 2001) pp. 38-41.

²²⁸ Ibid;

Presidential Library (2009), *The First All-Russian Women Congress Opened: 23 December 1908*. Online: <http://www.prilib.ru/en-us/History/Pages/Item.aspx?itemid=764>

²²⁹ Rex Wade. *The Russian Revolution, 1917* (2nd edition) (Cambridge: Cambridge University Press, 2005), pg. 117.

nations such as the UK, France, and the United States of America faced similar situations that would help women fight for emancipation within their own countries.

One of the first avenues to promote the ideas of feminism in the UK was the publication of the *English Woman's Journal*, which was founded by Barbara Bodichon, Matilda Mary Hays and Bessie Rayner Parks²³⁰ and ran from 1858 to 1864. This journal discussed issues about the role of women such as female employment, expansion of work opportunities and law reforms in regard to the sexes.²³¹ Furthermore, with other members, such as Helen Blackburn, Jessie Boucheret and Emily Faithfull,²³² they founded the Langham Place Group at the Journal's offices, which among other activities, established the Society for Promoting the Employment for Women. Like the cooperatives in Russia, the Society aimed to prepare women for employment through training and apprenticeships.²³³

One of the earlier feminist movements in France was the *Union des femmes pour la défense de Paris et les soins aux blessés* (Women's Union for the Defence of Paris and Care of the Injured), which was founded during the Paris Commune in 1871 by Nathalie Lemel and Russian exile, Elisabeth Dmitreff. The Union advocated for gender and wage equality, right to divorce and secular education for girls.²³⁴ Like groups in the UK, the Union established cooperatives, including a restaurant that was called the *La Marmite*. Additionally the group advocated for education for women, opening a free school at the church of Saint-Pierre de Montmartre.²³⁵

²³⁰ Stefan Helgesson. *Literature, Geography, Translation: Studies in World Writing*. (Cambridge Scholars Publishing, 2011) p. 111.

²³¹ Hilary Fraser, Judith Johnson & Stephanie Green. *Gender and the Victorian Periodical*. (Cambridge: Cambridge University Press, 2003)

²³² Felicity Hunt. *Emily Faithfull* from *Oxford Dictionary of National Biography (online edition)*. (Oxford: Oxford University Press, 2018) doi:10.1093/ref:odnb/37409

²³³ Gerry Holloway. *Women and Work in Britain since 1840*. (London: Routledge, 2005) p. 216

²³⁴ François Bodinaux, Dominique Plasman & Michèle Ribourdouille. "On les disait 'pétroleuses' (2005) Online: <https://web.archive.org/web/20141228210000/http://www.cgt-opf.fr/histoiresoc/petroleuses.PDF>

²³⁵ Ibid;

Claude Revate. *Women and the Commune*, in *L'Humanité*, (19 March 2005)

Similar to UK and France, there were similar feminist organisations across the Atlantic in the United States of America. This includes the Seneca Falls Convention, which was held in New York in 1848. Organised by Elisabeth Cady Stanton and local Quakers, the gathering was treated as one of the first women's right conventions calling for a discussion on the rights of women.²³⁶ One of the principal documents to arise from the convention was the Declaration of Sentiments and an accompanying list of resolutions, which was modelled upon the United States Declaration of Independence, and was signed by 68 women and 32 men, which comprised of exactly one-third of all attendants to the convention. This document was viewed as significant, because according to American Social Reformer Frederick Douglass, it was considered *"the grand movement for attaining the civil, social, political, and religious rights of women."*²³⁷

In all three of these nations, there is evidence of the expansion of a feminist wave of female higher education. Like the feminists in Russia, women in these countries founded cooperatives, held conventions and advocated for women's rights. This demonstrates that the movement for gender equality and the feminist wave was a universal pursuit and not something that was confined to Russia. Furthermore, I argue that the actions of women from Russia and other nations, have questioned and ultimately dismantled the structured norms that reinforced gender roles that saw them as only wives and mothers. In this way, these women proved that they could perform roles that traditionally were designated for men.

²³⁶ Judith Wellman. *The Road to Seneca Falls: Elizabeth Cady Stanton and the First Women's Rights Convention*, (Illinois: University of Illinois Press, 2004).

²³⁷ North Star, (July 28, 1848), as quoted in ed. Philip S. Foner, *Frederick Douglass on Women's Rights*, (New York: Da Capo Press, 1992), pp. 49-51

Conclusion

Female higher education formed a critical component and contributed to the success of the feminist wave in Russia during the nineteenth century. By examining the women question, which was made possible due to relaxation of several censorship laws, women, through the influence of nihilism and nihilist literature provided by Turgenev and Chernyshevski, as well as feminism, due to the growth of the Enlightenment, started to pursue higher education in universities. Initially, women studied in Russia, but later abroad to cities such as Zurich, Bern, Geneva, Heidelberg, Paris and Naples, while a few even went across the Atlantic in the United States of America, following the university ban in 1864. Their pursuit of higher education put Russian women in stark contrast to their bourgeois sisters, enabling them not only to question, critique and analyse the structured traditional role of women in society, as highlighted by the women question, but to shatter society's expectations of them and create a new identity of a new Russian women with the ability to perform duties that traditionally were designated for men. Moreover, female higher education became a crucial component of their emancipation during the nineteenth century, which gave women the freedom, due to increased access to opportunities, to become socially and economically independent.

Across the three chapters of this thesis, I have demonstrated how women broke through structural restraints defined by traditional gender roles. From the first chapter, I illustrated the beginning of this resistance, as some women, initially inspired by the nihilist characters of Rakhmetov and Bazarov in Russian literature, sought to establish their own destiny by enrolling in universities in Russia. Their enrolment was met with some resistance, as some Russians did not believe that higher education was suitable for women. This resistance convinced the government to ban women from attending universities in 1864, forcing some of them to travel abroad, if they wished to continue their studies. Those who did travel abroad initially went to the liberal Swiss city of Zurich, where women were allowed to study medicine at their university. From Kniazhnia, the first Russian woman to matriculate at the University of Zurich, who

unfortunately did not complete her studies, to Suslova, who obtained her degree in 1867, and Bokova, who obtained hers in 1871, they inspired a generation of Russian women, as their numbers in foreign universities grew, to pursue higher education. Additionally these women showed that they can work in roles that were traditionally designated for men, by writing articles or working as a medical doctor back in Russia. What these women demonstrated was that as long as one was focused and determined, there should be no barrier to higher education for women. In addition, they showed that as long as one persevered, there should be no reason to not obtain employment and to have a successful academic career. Moreover, at the end of this chapter I have highlighted the resistance of the government for women studying abroad, through the implementation of the Zurich ban in 1874, which threatened to derail Russian women's attempt to pursue higher education.

In chapter two, I highlighted how Russian women processed the consequences of the Zurich ban, as some left to join the revolutionary underground movement, while others chose to remain in Zurich, study elsewhere in Switzerland, or in Germany, where three notable Russian women, Kovaleskaya, Eivreinova and Lermontova stood out to become the first Russian women to obtain a doctorate in mathematics, chemistry and law respectively. Additionally, other Russian women chose to study in France, Italy or across the Atlantic in the United States of America. Some of these women had successful academic careers as a result of their studies. They included women from the Heidelberg Women's Commune, such as Kovaleskaya, who won a prize from the French Academy of Science on her work on the "Kovaleskaya top," which led to her obtaining a professorship at the University of Stockholm; Lermontova, who worked in laboratory in Russia after completing her doctorate; and Eivreinova, who in addition to her work with nihilism, as she found the journal (*Severniy Vestnik*), published numerous articles in relation to law. In addition to the trio above, other women used their study to further their academic careers, through writing articles, organising or chairing conferences, developing collections to be donated to museums, winning prizes, participating in expeditions, (like Maria Bakunin who was able to form a geological

map of Italy), working in laboratories or hospitals, joining the Sevastopol Biological Station, (like Pereislavtseva), or teaching (like Danchakoff, who taught in New York and became a pioneer in stem-cell research). Evidently, Russian women pursued a wide breadth of opportunities upon completion of their studies. Along with the growing number of Russian women attending foreign universities, the careers of these nineteenth century Russian women demonstrate how they broke the structured gender role of women as only wives and mothers. Moreover, other Russian women, who did not have any formal education, also shattered the structured gender roles, through their successful academic careers.

The first two chapters of this thesis focused on the core part of the feminist wave, that is the initial nihilist and later feminist movements that helped women pursue higher education, which was critical to the success of the wave. However, this wave could not have been sustained if it did not have a lasting impact on mainstream Russian society in the nineteenth century. This is illustrated in chapter three, where I explored the expansion of this wave, through their nihilist and feminist aspects. Regarding, the nihilist aspect of this wave, it was expanded to influence women, with the help of the *raznochintsy*, to adopt a persona to make them distinct from their bourgeois sisters or encouraged other women to halt their studies and join the revolutionary underground movement, as they believed that in order to emancipate women, one had to change the entire system. Furthermore, the feminist aspect of this wave was also expanded, when women in Russia established organisations for education such as the Sunday School, cooperatives such as the Society of Inexpensive Lodgings, the Women's Publishing Artel and the proposed Society for Women's Work. In addition, they established unions, organised conferences, pushed for women's suffrage and persuaded the government to create local education programs such as the Bestuzhev courses, which became extremely popular over time. The Bestuzhev courses' popularity, in addition to the other activities of nihilists and feminists point to an expanding feminist wave and a breakdown of traditional structured gender norms.

In addition to the growth of a feminist wave in Russia, as demonstrated across three chapters of this thesis, this wave expanded outside Russia's borders to touch parts of Europe and even the United States of America. This universality of this wave is evident in the number of non-Russian women studying in foreign universities, as well as the growth of feminist groups and cooperatives in nations such as France, Britain and the United States of America that pushed for women's emancipation in the nineteenth century. In closing, female education is an important step for the individual to obtain social and economic independence and for society to question and ultimately dismantle the traditional structured norms that prevented women from participating in education, which as a result will help reform society. This sentiment remains equally important today, as echoed by 2014 Nobel Peace Prize winner Malala Yousafzai who noted that education for everyone can help change the world.

"The content of a book holds the power of education and it is
with this power that we can shape our future and change
lives."²³⁸

(20373 words)

²³⁸ Alex Ward "I'm a Brummie now', says Malala, the schoolgirl shot by the Taliban, as she opens huge new library in her adopted home city" *Daily Mail*. September 4, 2013. Online: <http://www.dailymail.co.uk/news/article-2409774/Malala-Yousafzai-Pakistani-teen-shot-head-Taliban-opens-Library-Birmingham.html>

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