From the turn of the century till the beginning of World War I students from the Russian Empire formed the largest group of foreign students in Germany. In recent literature, Russian women have even been considered the pioneers of university education for women in Germany where the admission of females as regular students was permitted later than in other European countries. Between 1902 and 1917, 290 Russian women completed their studies at a German university. By discussing their backgrounds, education, migration trajectory and future careers, this article provides a collective portrait of this group. At the same time it makes clear that Russian women were preceded by Germans or other foreigners at all but one university. However, some of these figures were in fact pioneers both in their scholarly fields and in women’s academic careers in Russia and other countries. Thus, the article disproves the claim of their pioneering role in Germany, but at the same time opens up new perspectives on women’s higher courses and university education in Russia. Refs 49.

Keywords: Women’s higher education, women’s higher courses, student migration, German universities, Swiss universities, collective biography.

When the deputies of the parliament of the German Empire discussed the admission of women to the study of medicine in 1894, Prince Heinrich zu Schönaich- Carolath (a member of the National Liberal Party) briefly outlined the state of higher education for women in European countries. In Russia, after many years of women’s petitioning, Count...
Tolstoi had finally opened the universities of Petersburg, Kazan’ and Kiev to them in 1878, he claimed, erroneously, of course. Since women’s higher education was a matter of fact in “other civilized states”, Schönauich-Carolath found it unacceptable for Germany to stay so far behind [Stenographische Berichte 1894, p. 1047]. Such an implicit comparison between ‘progressive’ Russia and ‘backward’ Germany, again based on false assumptions1, can also be found in scholarly literature [Costas 1992, p. 115]. It has even been claimed that, by their very success, female auditors from the Russian Empire paved the way for German women [Burchardt 1997, p. 92] who were allowed to matriculate at German universities as late as 1900–19092. Most recently, it has been asserted: “If it had not been for women from the Russian Empire, there simply would be no academic education for any women. They had the idea first. And they successfully fought for it, decades before women from other countries followed their example” [Hirsch 2013, p. 79]. In Germany, Jewish women (both native and foreign) formed a considerable part of those who attended university as auditors (before women were admitted as regular students) and also took the lead chronologically. Thus, Russian Jews were the pioneers “within the pioneer group” [Hirsch 2013, p. 141]. Similar claims have been made for Russian women at Swiss universities [Im Hof 1984, p. 505; Rogger and Bankowski 2010, p. 15], without, however, singling out Jewish women. To top it all, Russian women in Switzerland are said to have laid the foundation for women’s regular university studies “worldwide” [Rogger and Kappeler 2011, p. 69]. As for Russia herself, the women’s higher courses established in the 1870s, have traditionally been considered as women’s universities, not only by Soviet [Fedosova 1980] and post-Soviet historians [Vachromeeva 2003; Ivanov 2004, p. 96], but by Western colleagues, as well [Engel 1983, p. 61; Johanson 1987, p. 72, 76]3.

By investigating those women from the Russian Empire who successfully completed their studies at German universities and earned a doctor’s degree, this article discusses the claims of Russian women’s pioneering role for female university education in Germany and Russia’s avant-garde function in the establishment of institutions of higher education for women back home.

Clarifying the chronology of graduations

Three forerunners received their degrees at German universities in the 1870s: Sof‘ia Kovalevskaja4 was permitted to audit courses at Heidelberg in 1869, and was followed by her friend Yulia Lermontova one semester later. Both went on to Berlin but were denied the permission to audit courses at the university. Therefore, Kovalevskaja studied pri-

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1 She claims that women in Russia had studied medicine since 1872, as if this had continued up to the beginning of the 20th century. Though she did not repeat that in various other comparative articles, this one has been used as a source of reference by subsequent authors.

2 Education was under the jurisdiction of the constituent states. The first to admit women to regular studies was the Grand Duchy of Baden (universities of Heidelberg and Freiburg) in 1900, the last the Grand Duchy of Mecklenburg-Schwerin (Rostock) in 1909. Prussia admitted women to its 10 universities in 1908. Bavaria (three universities), Württemberg (Tübingen), Saxony (Leipzig) and the Thuringian states (Jena) allowed women to matriculate in 1903, 1904, 1906, 1907, respectively. Hesse (Gießen) and Alsace-Lorraine (Straßburg) both took this decision in 1908, preceding and following Prussia, respectively.

3 Somewhat more cautiously, Kobchenko (2007) refers to the university status of the Higher Women’s Courses in Kiev only for the second period (1906–1917).

4 For reference purposes, we have preserved the German transliteration of students’ names, putting the English-style transliteration in brackets in some cases to avoid confusion. — Ed.
ately with the famous mathematician Karl Weierstraß and Lermontova worked privately in the laboratory of the professor of chemistry August Wilhelm Hofmann. In 1874, both were awarded a doctor's degree at Göttingen: Weierstraß had chosen this university for Kovalevskaia because he could refer to the precedent of Dorothea Schlözer's degree. But whereas Kovalevskaia received her degree in absentia on the basis of two written treatises only, Lermontova, in addition to her dissertation, underwent a regular examination in chemistry and physics [Tollmien 1997; Roussanova 2003; Lermontova 1961, p. 376–377]. Another Russian woman, Anna Evreinova, who had fled Russia against her parents' will had joined Kovalevskaia and Lermontova at Heidelberg and then went on to Leipzig. She audited courses and was awarded a doctor's degree in law [Drucker 1956] after a regular examination in 1873. All three were noblewomen. Kovalevskaia was to become the first female professor of Europe (at the University of Stockholm), whereas Lermontova declined to work at women's higher courses. Evreinova became a prolific author and the future editor of Severniy Vestnik [Pietrow-Ennker 1999, p. 295–301].

However, a woman's doctor's degree just by itself was not a novelty. Some women had been awarded such degrees at German universities more than a century earlier and also in the meantime [Maurer 2015a, p. 143–144]. As Kovalevskaia and Lermontova were not allowed to attend university courses for the time required to apply for a doctorate (and Kovalevskaia did not even have to pass an examination) only Evreinova can be considered a pioneer of women's university education. But though Rahel Gothein in her speech at the first graduation ceremony (Abiturfeier) of Germany's first gymnasium for girls urged her class mates to follow Kovalevskaia's example [Birn 2015, p. 102–103], the three forerunners of future Russian doctors of German universities did not figure prominently, if at all, in the discussions about the admission of women to German universities. In turn, Russian women neither referred to this precedent nor did they make Kovalevskaia their role model. What is more, in a number of German universities women had audited courses in the late sixties and early seventies. When the tsar interdicted women's attending the University of Zurich in 1873, many of those who had been studying there, enquired at German universities whether they might continue their education there. And it was precisely now that universities took a principal decision: They banned women's auditing [Birn 2015, p. 107–108].

Only from 1892 onward new auditors were admitted, but some universities allowed this as late as 1900 (Gießen) or 1902 (Jena). The first auditors were German, British and American women. Most of the Germans were teachers of girls' schools (who had received their training at teachers' training colleges), but some universities would admit only women who had passed the final examination of a Gymnasium, the Abitur. (Some did so at Gymnasien for boys without having attended them, of course.) Americans usually held a B.A., but again, not all universities considered this as sufficient [Birn 2015, p. 108–111]. In the overall number of female auditors, foreign women had a considerable share. In Berlin where auditors were admitted from 1895 on, they made up 51% in 1895/96 and

5 On the occasion of the 50th anniversary of the foundation of the university, August Ludwig Schlözer's daughter had undergone an examination there and had been awarded a degree in 1787. On this very special case in which Schlözer used (or rather misused) his daughter in order to disprove the theories of the most famous pedagogue of the time, Johann Bernhard Basedow, see: [Kern 2010].

6 See her Latin doctor's certificate (which Drucker did not use) at Universitätsarchiv Leipzig: Jur. Fak. Prom. 496. However, this is the only document preserved. On her father's efforts to make her the mistress of Grand Duke Nikolai Nikolaevich see: [Rogger and Bankowski 2010, p. 30].
26.9% in 1904/05 [Lehnert 1999, p. 12]. At Göttingen, of 546 women who audited courses from 1896 to 1908 178 (32.6%) were foreigners including 96 Americans and 42 Russians [Costas, Roß 2002, p. 26–27].

However, not the number of female students itself, but rather the successful completion of their studies can prove women's aptitude for them and thus provide an argument for granting them regular matriculation. In Germany at that time, the final examination was usually a doctorate (which was also the first academic degree)\(^7\). Even at the time when women were admitted only as auditors they could request permission to take a doctoral degree. For foreigners this was the normal way to take their finals at a German university\(^8\). Therefore, by establishing the numbers and names of women from Russia and the year in which they graduated\(^9\), one can try to assess their role in achieving a woman's right to matriculate at German universities. Since annual bibliographies of dissertations were published from 1885/86 onwards — and from 1904/05 on they included information on date and place of birth, citizenship, secondary education, universities attended and number of semesters spent there [JHSS 1885/86–1918] — it is possible to compile a list of women\(^10\) from the Russian Empire\(^11\) who received a doctorate from a German university. Up to 1918, 290 women passed the pertinent examinations\(^12\).

By the end of the summer semester of 1907 at least 170 women all over Germany had been awarded a doctoral degree [Boedeker 1938, p. LXX]\(^13\). Most of them had taken their degrees as auditors because Prussia, the biggest German state which boasted 10 universities at that time, admitted women as regular students only in autumn 1908. And it is certain that nearly all foreigners had done so since those states which had granted matriculation earlier usually restricted this to graduates of German Gymnasien. Including

\(^7\) A professorship required, in addition, a Habilitation. This was usually achieved by an additional dissertation, a lecture and an extended discussion about the latter with all members of the respective faculty, i.e. Philosophische (comprising in most German universities both the humanities and sciences), Medizinische (medicine), Juristische (law) or Theologische (theology).

\(^8\) For the entry into professions such as physicians, pharmacists, judges, lawyers and teachers, a state examination was obligatory. In the humanities it was often taken only after the doctorate whereas in medicine it preceded it. However, as these professions were not open to foreigners, the state examination was de facto restricted to citizens of the German Empire.

\(^9\) The date given here is the official date of the doctoral certificate. This was only issued after the new doctors had sent the obligatory number of printed copies (in most universities around 200) to the university library. Sometimes this was done only in the year following the examinations.

\(^10\) In most of the uncertain cases (for some Yiddish, Georgian, Armenian and other names) the sex can be established consulting lists of first names of these languages or the CVs usually printed in the dissertations.

\(^11\) Most of them were not ethnic Russians, and some even not Russian subjects. The decisive criterion for selection was the place of their birth and their socialization. For an example of a Moscow-born German woman who had fully absorbed Russian culture and the outlook of the Russian intelligentsia see: [Maurer 2015b, pp. 159–162].

\(^12\) Five of them are not included in JHSS up to 1918. In two cases, the dissertation does not seem to have been printed (because of the war). In two other cases, the rector was not allowed to deliver the certificates during the war. In one case the book was printed and a number of copies delivered to the university, but the certificate seems to have been issued only in 1925 [JHSS 1925, p. 247]. Documents of these examinations (including reports on the dissertations) were found in the university archives of Gießen, Tübingen, Freiburg, and the Archives Départementales du Bas Rhin at Strasbourg (for the formerly German university of Straßburg).

\(^13\) Boedeker’s statistics of 169 women and the bibliography of their dissertations are based on JHSS (which covered doctorates conferred from August 15 to August 14 of the following year). She included the forerunners, but obviously she did not know about the medical doctorate at Freiburg 1895.
the three forerunners, 39 women came from the Russian Empire, making up 22.9% of all female graduations up to 1907. However, though female auditors had obtained doctorates since 1895 (see appendix), the first two Russians received their doctorates only in 1902: the mathematicians Nadeschda Gernet and Ljubowj Sapolsky (Zapol'skaia) at Göttingen. The early birds included also three 'Russian' chemists: Amalie Hertz from Warsaw received her doctorate in Berlin (1904), Vera Krilitschewsky and Otilie Jakowkina, both from Odessa, at Gießen in 1904 and 1905. The physicist Alexandra Wassiljewa had been supervised by the future Nobel laureate Walther Nernst at Göttingen (1906). A botanist graduated in Munich in 1907 (Helene Woronin, née Veselovskaia). Two economists (or rather social scientists) succeeded at Freiburg (Sonja [Sora-Lea] Rabinowitz from Mogilev in 1903) and Heidelberg (Elisabeth Gorowitz, née Willenz from Kiev in 1907). The humanities were represented by two philosophers (Maria Raich, Straßburg 1905, and Helene Saitzeff, Heidelberg 1907) and a historian (Nadeschda Wrasky, Heidelberg 1907). Experimental research in psychology was conducted by Perla Ephrussi (Göttingen 1904).

The vast majority, however, were future physicians. Whereas they constituted 39.4% (67) of the collective group of female doctors prior to 1908, they made up 59% (23) of the 'Russian' subgroup. The first nine of them received their degrees at Freiburg: one in 1903, four in 1904, another four in 1905. In the same year the first Russian medical doctor graduated in Berlin, to be followed by another one in 1906. But only from 1907 on, when 11 medics from the Russian Empire graduated in the German capital the Berlin alumnae constituted the largest subgroup every year (both of the medics and of all Russian graduates). In the collective group of all Russian female doctors (up to 1918) there were 245 medics (84.5% of 290). 15 women (5.5%) graduated in the humanities, 14 (4.8%) in the sciences, 7 (2.4%) in political economy (Nationalökonomie including both economics and social sciences), 4 (1.4%) in law, 3 (1%) in mathematics, and 0.7% (2) in psychology.

The role of pioneers can be defined either as taking the lead chronologically or as paving the way for others. But only at Gießen, was a Russian woman the first to receive a doctorate. In all other German universities, Russians had been preceded by German women or other foreigners at least by four years, in most cases by 7 to 12 years. The largest group among the very first alumnae were German women (12 universities), the second British (4), the third American (3). There were also a Dutch and a Japanese woman who led off at Freiburg in 1895 and Marburg 1905 (see appendix). Thus, the claim that in general foreigners were not only the first auditors but also the first graduates cannot be confirmed. Even less so the claim that Jewish, in particular Russian Jewish women were the pioneers.

If the claim of primacy refers to particular disciplines, however, Russian women may be credited with pioneering in mathematics, chemistry and law, but only if we include the forerunners of the 1870s. In the period of quasi-regular auditing from 1892 on, however, the Russian graduates of Göttingen were not the first in mathematics, as three women had completed their doctorates in 1895 and 1896 (Tobies 1997, p. 132–140): the first one English (at Göttingen), the others German (Heidelberg) and American (Göttingen), respectively. The first 'Russian' to complete a doctorate in chemistry after regular auditing
did so four years after the first German\textsuperscript{17}. However, including Kovalevskaia and a fourth woman at Göttingen in 1907 (Wera Lebedeff), Russians were also the majority of all seven women who graduated in mathematics by 1907. In law the first Russians graduated in 1912 at Gießen and in 1913 to 1914 at Heidelberg (three women), whereas the first woman had received her degree at Heidelberg in 1908 [Boedeker 1935, p. 1].

In medicine which was the field of study for Russians (both men and women) in Germany the first degree by a Russian woman\textsuperscript{18} was earned at Freiburg in 1903, eight years after a Dutch woman had been the very first (for the degree in general and for medicine in particular) at the same university. In the meantime, 12 others had taken that degree all over Germany. In the same year as this Russian-Jewish woman 9 other women earned the same degree at various universities [Boedeker 1939, p. LXX]. The take-off of medical doctors in Berlin was somewhat delayed probably because of the long-standing refusal of Berlin clinicians to admit women to their courses. Therefore, women who had begun their studies in the German capital had to continue elsewhere. This was probably the reason for Rosalie Dychno to move on to Halle, Gießen and Freiburg, as well as for Nadeschda Rubinstein\textsuperscript{19} who had spent three semesters in Berlin and eight in Freiburg. Both received their degrees in Freiburg in 1904 and 1905, respectively. Only from 1904 on could women attend all necessary courses in Berlin though some were still taught separately for men and women [Burchardt 1997, p. 103–105]\textsuperscript{20}. Sophie Strisower, the first Russian medical doctor who received her degree in Berlin in 1905, had begun there, but then gone on to Halle and Freiburg and returned to Berlin for the exams. The first German medical doctor in Berlin who had earned her degree some months earlier, had also begun there and continued at Halle where she even passed her state examination in 1904. She obviously returned to Berlin only for the doctorate [JHSS 1904/05, p. 17]. Thus, those who graduated in 1907 where practically the first who had had the chance to spend the clinical part of their studies in Berlin.

However, if women from Russia were not the very first to complete quasi-regular studies they may still have contributed to establishing the right of equal admission of females to German universities by their sheer number. The field in which Russian women constituted the majority of auditors as well as alumnae, however, seems ill-suited for demonstrating this point because their right to do so was highly disputed. It is true that in Berlin 58.6\% of all women who earned a doctoral degree in medicine before 1918 were Russians, only 38.7\% Germans. In some years there was not a single German female doctor and only in 1912 there were four, in 1913 seven [Burchardt 1997, p. 275, cf. list of names p. 277–281]. But almost from the beginning of mass auditing there had been tensions between German and Russian students. In 1899, the (male) clinical students of Halle authored a protest which was basically directed against all female students and called all male German medical students to join them [Bonner 1992, p. 117; German quotations in Burchardt 1997, p. 84]. In 1901, Leipzig students demanded the exclusion of Russian women because their qualification was considered much lower than that of German female auditors (for whom in fact the Abitur was obligatory) and because of lacking Latin

\textsuperscript{17} Clara Immerwahr (the future wife of Fritz Haber) at Breslau in 1900.

\textsuperscript{18} Balbina Barbara Frenkel (orthodox) from Piotrków in the Kingdom of Poland (at that time called Prvilianski krai).

\textsuperscript{19} The wife of the philosopher M. M. Rubinstein.

\textsuperscript{20} Even after matriculation had been permitted in Prussia in 1908, some professors in Berlin and elsewhere applied for special permissions to exclude women from particular courses [Bonner 1992, p. 116].
and/or being Jewish they were not eligible for the Women’s Medical Institute in Petersburg [Mazón 2001, p. 146–147]. The Association for the Promotion of Women’s Higher Education (Verein Frauenbildung — Frauenstudium) appealed to the authorities to introduce special examinations for the admission of foreign women (as in Switzerland) [Burchardt 1997, p. 86]. In 1901, Elise Taube (who would be the first medical doctor of Berlin four years later) filed a complaint with the Prussian minister of education: She had been denied admission to clinical studies because otherwise one would have to admit foreign women as well, but there were not enough places [Burchardt 1997, p. 87]. In Halle enrolment in the dissection course in 1901 totalled 105: 73 male medical students (70 Germans and 3 Russians), and 32 female auditors (2 Germans and 30 Russians)21. Five women appealed to the Prussian minister of education because they were afraid that the handful of German women would “disappear” in “the mass of Russians” and would be put on a level with those less qualified students. Any underachievement of the Russians would be scored against German women as well [full text in Lange 1901/02, p. 244–245]. The leader of the German women’s movement, Helene Lange endorsed this protest claiming that it was not directed against “Russians per se”, but only against “insufficiently qualified elements”. According to Lange the five German women had acted “energetically, but moderately and correctly in every respect” and thereby performed a “crucial service for women’s higher education” [Lange 1901/02, p. 245, 246]. Both Taube’s individual and the Halle collective address were in keeping with the guideline of the German women’s movement: They demanded matriculation for women on an equal basis with men, based on identical requirements. Therefore, Taube pleaded to exclude all German women who lacked the Abitur certificate, as well, and the women’s movement objected to the matriculation of notabene female teachers without Abitur which Prussia granted in 1909. In fact, the next petition signed by 42 female holders of the Abitur certificate from various Prussian universities in 1902 confined itself to the demand to halt admission of women without Abitur and to achieve that by introducing regular matriculation for women22.

It is true there was much uneasiness and some bias against Russian women studying in Switzerland. However, this was basically connected with the so-called nihilist women and the group of revolutionaries in Zurich in the 1860s and early 1870s. The students of the turn of the century were much more oriented towards their studies and more bourgeois in their appearance [Neumann 1987, p. 163–182]. In Germany those who demanded higher education for women not only distanced themselves from the image of the radical women of the 1870s, but in fact tried to change the perception of Russian women. From the 1880s on, when German women also studied in Zurich, more varied reports can be found [Albisetti 1988, p. 196–199; Mazón 2003, p. 60–67]. Though there was some anti-Russian and some anti-Semitic sentiment in individual statements23 the concern of most

21 Unlike other disciplines to which students were also admitted with the Abitur of a Realgymnasium or even Oberrealschule, the study of medicine required the Abitur of a classical Gymnasium. The admission of Russian women was an experiment which aimed at testing whether one could do without the classical Abitur. See: [Peter 2006 (for the numbers p. 107)].

22 Abridged text of the petition: [Burchardt 1997, p. 88].

23 Hermine Edenhuizen who signed the Halle women’s petition (and was to become the first female gynaecologist in Germany) complained to the dean about the “nasty small Jewish figures” (die scheußlichen kleinen jüdischen Gestalten [Peter 2006, S. 112]. In her memoirs she does not mention this petition at all, and about Russian women in Zurich (where she also studied) she only states that they debated a lot and some of them were dressed carelessly [Heusler-Edenhuizen 1999, p. 53].
of these women and especially the women’s movement at the turn of the century was to achieve equal admission based on identical or equivalent education. In particular, there was no allusion to foreigners let alone Jews in the petition of 42 women from all Prussian universities. Among the seven Berlin auditors who signed this petition there were at least four German Jews.24

In fact, after the series of male protests and female petitions the requirements for the admission of Russian auditors soon changed: In December 1901, the rector of the University of Halle warned publicly, that from the following semester on the certificates of Russian gymnazii for girls would not suffice for admission [Peter 2002, p. 109]. A month earlier, the Saxonian minister of education had already decided the same [Mazón 2001, p. 147]. The Bavarian minister was to follow in the beginning of January 1902 (K. Bayer. Staatsministerium), the Prussian in June 1902 (Minister der Geistlichen […] Angelegenheiten). His decision was based on a very detailed and well-informed account on Russian high schools for girls [Die höheren Mädchenschulen in Russland]. However, in most universities (but not in Halle) auditors who had begun their studies before were allowed to complete them. The three universities with the highest numbers of Russian doctors are cases in point: Berlin (121), Straßburg (44), Freiburg (37).

### Russian doctors of German universities:

A female group portrait

Though German universities constantly tightened the requirements for admission (especially by demanding a certificate of Latin at the level of Russian boys’ gymnazii) they acted in fact rather accommodatingly. Russian women in turn soon adapted themselves to the new regulations. Whereas the older cohort had diverse educational backgrounds and would begin their university studies at a fairly advanced age, the younger would head for the university right after graduation from the gymnaziia, and that is precisely why they passed the additional exams for Latin as soon as possible. Some seem to have studied Latin even while still at the gymnaziia, whereas others worked as teachers after graduation and studied Latin at the same time.

However, in order to begin their studies 126 women (43.4 %) entered a Swiss university. That Switzerland attracted a higher number of beginners than Germany herself (117, 40.3 %) is the more surprising as fees for matriculation, courses and doctorates went up there at the beginning of the 20th century. But admission was much more liberal there, and most German universities accepted students who had leaving certificates issued by another German-speaking university (including, of course, Swiss). Thus, five women who seem not to have had a certificate of Latin, but had been fully matriculated students at

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24 I do not agree with Hirsch that these German women incited prejudice (hetzten) against the Russians. The names of the Berlin signatories are in: [Burchardt 1997, p. 88]. The identification of five Jews in: [Hirsch 2013, p. 188 note]. As Hirsch erroneously takes Elise Taube for a Jew [p. 126 and note p. 143], I have checked her classification of these five women. Antonia Weitzmann whom she considers as Jewish might be Genofova Josepha Antonia Weitzmann (born and baptized in November 1865): https://familysearch.org/ark:/61903/1:1:NZ7K-DTG (accessed 03.01.2016). Anyhow, the name Weitzmann is fairly widespread in Southern Germany and Austria. Taube’s biography (*1861) and background can be found in the *curriculum vitae* of her dissertation. As Weitzmann obviously never graduated there is no *curriculum vitae*. 

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Bern, went on from there to Straßburg (where they continued as mere auditors)\(^{25}\). The same is true of five others who went from Bern to Freiburg\(^{26}\). Bern (where 67 had begun their studies) was more popular than Zurich (35). It demanded a certificate of a Russian girls’ gimnaziia only from 1901 on, and as late as 1903 the former rector publicly endorsed its curriculum without Latin. However, in 1904, all Swiss universities agreed to demand proof that Russian applicants were entitled to study at a Russian university. Otherwise, they had to pass an entrance exam [Neumann 1987, p. 111].

The above examples also demonstrate the migration which was typical of German as well as of most Russian students in Germany. 83.8 % of these 290 women attended several universities in turn. Merely 34 (11.7 %) studied at one university only. In addition, there were 13 (4.5 %) who continued and completed their studies at only one German university (after beginning them in Russia)\(^{27}\). Quite a few enrolled at three or four universities in turn, and one attended as many as seven. So, these women were not forced by the circumstances (e. g. non-admission to clinical studies in Berlin), but adapted themselves to the German model. At the same time, it is also clear that many women did not migrate on their own. Girls from the same town or graduates of the same gimnaziia went to Germany together. There are many examples of two women who studied and changed universities together. In some cases, cousins or sisters went together. Usually the elder one obviously waited for the younger to complete gimnaziia, but there is also an example of a girl who went to Zurich right after graduation from gimnaziia and was joined by her sister who was seven years her older the following year. (Together they went on to Berlin). Only four doctors took their degrees at Leipzig — but all came from Tiflis and had studied four semesters at the Medical Institute for Women in Petersburg before. They passed their exams between March and July 1909. A group of five from very different places in the Russian Empire met at Bern, but in autumn 1908 went on to Freiburg together and passed their exams between December 1909 and May 1910. A few women were accompanied by their brothers. Others met their future husbands (also from the Russian Empire) abroad and then continued their studies together. All these patterns can also be observed outside this group\(^{28}\).

Due to the religious and ethnic affiliation of these women their cultural backgrounds were diverse. The majority were Jewish (215, 74.1 %), the second largest group Eastern Slavic (26, 9 %). 9 were Baltic Germans (3.1 %), 8 Russian Germans (2.8 %), 6 Polish (2.1 %). Other ethnic groups provided 2.1 % (4 Armenians, 1 Georgian, 1 Lithuanian), in 20 cases (6.9 %) ethnicity and religion remain unknown. Some inter-ethnic cooperation can be observed. The Tiflis ‘quartet’ consisted of three Slavs and one Russian German, the two chemists of Gießen who arrived and lived together, where Jewish and Russian, respectively. The Jewish group was heterogeneous in itself. In addition to women from the pale of settlement there was quite a number born outside and presumably Russian by culture. Of the 42 women from the former Kingdom of Poland only two were Polish, but some of

\(^{25}\) For these women a Latin exam is mentioned neither in their CVs nor in the matriculation edition of the University of Bern on the web (which usually does indicate such certificates). See http://apps.uni-archiv.unibe.ch/index.php?syst=stud_1834_1914 and for the principles of admission: Statut für die Kaiser-Wilhelms-Universität, § 48.

\(^{26}\) In addition, there was one with only four (instead of eight) years of Latin.

\(^{27}\) 12 women began their studies in various West and Central European countries (4.1 % of 290).

\(^{28}\) This is obvious in the databases of Zurich and Bern (on the web) and the lists of students (which German universities printed every semester) or the lists of auditors (for most universities only hand-written in the archives).
the Jews were Polish by culture. Likewise most Jews from the Baltic region where 34 of all women originated (but only 9 were Baltic Germans\footnote{One woman who was born in Riga of Prussian parents went to secondary school in Berlin. So she might rather be considered German than Baltic German.}) were German by culture (though most of them had attended Russian \textit{gymnazi})].

The high proportion of Jews was, of course, due to the anti-Jewish quota back home which applied also to women's higher courses and the Medical Institute for Women in Petersburg. And this in turn accounts for the fact that almost 85\% of all Russians studied medicine because this was the only field Jewish women could expect to find work in.

Almost half of the medical doctors (124, 50.6\%) worked as physicians later on, most of them (83) in the Russian Empire and/or Soviet Union. 91 had acquired the \textit{lekar'} degree soon after their German graduation \citep[Российский медицинский список 1908–1916; Список врачей СССР 1925]{postwardoctorregister}. However, it does not seem to have been easy to find a permanent job. Quite a few worked as private doctors, municipal doctors, zemstvo doctors in turn, indicating a new place of work in successive editions of the Russian medical register\footnote{For the postwar period the Polish register of doctors has been consulted: \textit{Urzędowy spis lekarzy uprawnionych do wykonywania praktyki lekarskiej oraz aptek w Rzeczypospolitej Polskiej}. Warszawa, 1924/5. For Latvia: \textit{Latvijas ahrstu, weterinarahrstu, sobahrstu, dentisu, farmazeitu un wezmahtu saraksts 1920} [Registry of doctors, veterinarians, dentists, pharmacists and midwives 1920]. Riga 1920.} A Jew from Courland who cannot be traced in either Russian or German registers worked for the Russian Army in World War I. In a similar case, the only proof of her professional activities is the licence a physician received in Palestine in 1944. Sara Neiditsch (Najdič) seems to have worked as a doctor in Petrograd till 1920, then went to Berlin and worked in the policlinic of the Institute of Psychoanalysis, but returned to Russia in 1923. Some stayed in Germany or went on to another country from there. Among the 12 doctors who worked in Germany \citep{Ärztinnen im Kaiserreich} there were Baltic Germans, Russian Germans and Jews from various parts of the empire.

For other disciplines, the professional lives are more difficult to establish. However, there is one outstanding group: the three mathematicians (who all graduated from Göttingen University) became professors of institutions of higher education and universities. One of them who had met her future husband at Göttingen (where he also took his degree) was to become the first female professor in Rumania (at the University of Iași): Vera Lebedeva(-Myller). The physicist Nadeschda Galli who worked in the Meteorological Institute in Ekaterinburg in 1916, later became a professor at the University of Michigan. The Baltic-German Duchess Leonie von Keyserling (married name: von Ungern-Sternberg) was a writer during the Weimar Republic and then taught at two Chinese institutions of higher education. Another Baltic German was to become the first female full professor of Germany: Margarete von Wrangell at the Agricultural Academy (Hohenheim) in 1923. The psychologist Perla Ephrussi (Polina Efrussi) was to become professor of the Lenin-grad Brain Research Institute. The chemist Wasjuchnowa would teach as \textit{privat-docent} in Kiev from 1914. In 1927, she was a \textit{privat-docent} at the University of Baku. The historian Nadeschda von Wrasky (married name: Botkina) taught at Petrograd University until she was dismissed in 1923. Catharina von Maltzew (Mal'ceva) was on the staff of the Moscow conservatory and later of the Academy of Pedagogical Sciences. Olga Eliascheff who published a number of medical articles in French in the 1920s seems to have worked as a researcher. Some others continued to publish as independent researchers: Maria Raich
(married name: Oesterreich) or Rosa Heine (Katz) who only after her emigration from Germany got a research position at the University of Stockholm (where her husband David Katz became professor).

One of the chemists, Ottilie Jakowkina, started her professional life working in the laboratory of the city of Odessa whereas another one went on to become a specialist in Assyriology (Amalie Hertz). A couple of women translated scholarly works from Russian into German or vice versa (Ewa Ramberg; Minna Ostrowsky). The botanist Warwara von Polowzow did the same in the field of philosophy where she carried on after graduation. During World War I she was a member of staff and finally deputy editor of the journal Trudovaya pomoshch, after the war she represented various Russian organizations in London. Others became journalists: the philosopher Lenore Kühn who was also a public relations officer of the German National People’s Party (Deutschnationale Volkspartei) or the social scientist Judith Grünfeld who worked in Germany, Denmark and the US (where she became a researcher). The law specialist Rebecca Jacobsohn (married name: Zadik) was a welfare worker and wrote about social questions for the German Jewish press.

At least 19 of the 290 women married a German and stayed in Germany. In addition, three women married foreigners based in Germany (of whom the two Russian subjects eventually became professors). Most of the physicians continued to work in their profession whereas some of the others gave priority to their families. Certainly, the most prominent among the latter is Karl Liebknecht’s second wife, Sonja Ryss (an art historian from Rostov). Whereas she returned to Russia in 1934 and died in Moscow in 1964, others fell victim to Nazi persecution in Germany and the German occupation of Eastern Europe:

Jews were harshly discriminated against from the very beginning of Nazi power: Frieda Kalmanowitsch (married name: Freise) who had been the municipal doctor of Chemnitz was dismissed in April 1933 (and, like all Jews, lost her right to practice medicine in 1938). Some were able to escape by emigration: to Sweden (Heine-Katz), England (Tamar Löwenstein [née Karp]), Palestine (Frieda Orkin, Rebecca Jacobsohn[-Zadik], Regina Schur [née Frumkin] and Rosa Oleynick who finally reached the US). At least two were deported: Frida Bielschowsky to Theresienstadt in 1942 and from there on to Auschwitz in 1944. Ewa Ramberg who was deported to Theresienstadt only in 1944 survived and went to Palestine. Those Jews who were married to non-Jews had some protection as long as their husbands lived (and did not divorce them!). Maria Raich(-Oesterreich) survived. Two years after her husband’s death Vera Krilitschewsky-Tubandt committed suicide in 1944 in order to escape deportation. Xenja Bernstein’s (married name: Brendel) deportation scheduled for February 1945, was luckily postponed.

In Eastern Europe Jews were murdered as Minna Zalelsohn (married name: Katz) in the Dvinsk ghetto in 1941, Sterna Schmotkin in Minsk in 1943 or Regina Sapotschinska (married name: Lazerson) for whom neither place nor date are known. Two doctors stayed in the ghetto with their patients though they had been offered refuge on the ‘Aryan side’. Hana Braude(-Hellerowa) died in a bunker during the Jewish uprising in the Warsaw ghetto. Rosa Gowronsky (née Schabad, Polish: Szabad-Gawrońska) was the director of the orphanage in the Vilnius ghetto and became a female Janusz Korczak: she stayed with the children and perished with them. Some non-Jews died during the German siege of Leningrad, presumably of starvation: Gernet, Wrasky(-Botkina), Elisabeth Wolinskii (Dushevich-Volynskaia), Katharina Eliaschewitsch (née Filipchenko).
This was certainly the darkest chapter of German-Russian scholarly relations: many of those who had been considered mediators of German culture and promoters of German economic expansion before World War I [Siebe 2009, p.128–135] were killed by Germans. However, in the group of women discussed here a (future) member of the Nazi Party and a victim of Soviet soldiers can also be found31. Thus their fates reflect the full range of atrocities of the history of the 20th century.

Conclusion

That there would not have been academic training for women without the initiative of Russian women is a misconception that could have easily been avoided by consulting a truly comparative history of universities. In most European countries women started attending lectures or demanding admission around 1860. In Paris the first woman (a foreigner!) earned her medical degree in 1870, in Italy women were admitted to the universities in 1875, in London they were allowed to take degrees from 1877 on etc. [Anderson 2004, p.256–273]. In the United States, Oberlin College (founded in 1833) admitted women since 1834. Though one cannot put it on a level with European universities one might well compare it to women’s higher courses in Russia. Both institutions lacked the full structure of a university consisting of four faculties, but Oberlin, after all, was coeducational.

Neither can the question whether Russian women paved the way for university education in Germany be answered in the affirmative. They were not the pioneers of any particular discipline. And before a great number of female students of medicine from Russia attended German universities German women had completed their studies at Swiss universities. Though they were not allowed to call themselves doctors they were allowed to practice (according to the rules of free enterprise). The earliest clinic was opened by Franziska Tiburtius and Emilie Lehmus in Berlin in 1877, and by 1892 they had treated 17,000 patients [Albisetti 1988, p.129, 189]. By 1901, some 15 female doctors had established themselves in Germany [Bleker 2000, p.32–34]. May be one should consider them the pioneers? In 1899, the council of deputies from the 27 constituent states of the Empire (Bundesrat) allowed women to take the state examination in order to become a fully licensed doctor. The first nine did so in 1901, i. e. two years before the first Russian medical doctor took her degree. However, in some universities, in particular in Berlin, Russians provided the majority of medical doctors.

So what was the impact of these Russian women on the history of universities in Germany? Patricia Mazón has claimed that “the admission of women in general hinged on the exclusion of foreign women, mostly Russian Jews, who were held to a higher standard than their male compatriots”. And: “What qualified men to study at home was also recognized in Germany” [Mazón 2001, p.143–144, 154]. This is beside the point. Students at Russian universities were required to have the attestat zrelosti of a classical gymnasium. This included Latin and was the analogon of the German Abitur. Girls’ gimnazii lacked Latin (and some of them even a second modern language). In Russia the graduates were admitted to women’s higher courses (where Latin was not required), but not to the Medi-

31 The Baltic Germans Hachfeld (who in the thirties was a doctor for the girls’ youth organization) and von Keyserling (von Ungern-Sternberg who was killed by Soviet soldiers in Vienna in 1945, together with her husband).
cal Institute for Women (where it was obligatory). It is true that in Germany from 1902 on women were no longer admitted on the basis of a certificate of a Russian girls’ gimnaziia. But if they had a German Abitur they could even matriculate. Among the 290 doctors, there are four such cases. Not being a foreigner, but lacking the required education excluded the graduates of girls’ gimnazii.

The question is not whether Russian, and in particular Jewish women paved the way for German women, but rather whether the high numbers of such students perhaps delayed the matriculation of women. The director of the department of higher education in the Prussian ministry of education explained in the Prussian Diet in 1905 that matriculation would allow to apply stricter standards and thereby keep away “the less desirable” “elements”, in particular foreigners [excerpts in English translation in: Mazón 2003, p. 154]. He ostensibly suggested to introduce matriculation in order to reduce the number of women studying. However, this point might well have been made to overcome opposition. After all, he had considered the admission of women as early as the 1890s and had even asked the Göttingen mathematician Felix Klein to facilitate that by attracting American female students.

Another researcher interpreted the attitude of German students in a similar way: women who graduated from a Gymnasium deliberately turned against their Russian fellow students in order to make them the target of anti-feminist actions [Burchardt 1997, p. 91]. Thus, they used them as a “lightning conductor” which enabled themselves to settle down at German universities [Burchardt 1997, p. 92; quoting Bachmann, Bradenahl 1990, p. 14; cf. Im Hof 1984, p. 505]. But who sent the “lightning” then? There had been a lot of opposition to women’s university education in the 19th century, but it declined in the early 20th century. Certainly, the professors who graded the dissertations seem to have done so in a non-confrontational, business-like manner. And with regard to foreigners, up to World War I professors were more liberally-minded than students. In particular, those professors with whom the outstanding Russian mathematicians and future professors studied needed no confirmation of women’s capability as they had supported the idea of women’s admission as regular students and had supervised the dissertations of female auditors before.

In fact, the first Russian mathematician applied for the permission to audit courses at Göttingen six months after the first female mathematician had graduated there. L. Sapolsky had completed both the Women’s Pedagogical and the Bestuzhev Courses before she went to Göttingen where she studied for eight semesters. In November 1899 she applied to be admitted to the doctoral exam. She passed it in June 1900 (after it had been postponed at her request). The degree was conferred in May 1902 after her very voluminous dissertation had been printed. In 1905, based on an exceptional permission, she was the first woman to earn the degree of magistr at a Russian university (Moscow). While she was reworking her Göttingen dissertation for the Russian magistr dissertation she already thought of the Russian doctorate and asked her German supervisor’s advice for finding a topic.

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32 VII + 481 + VI pp.
33 See the file on her graduation (including the minutes of her exam as well as the reports on the dissertation and the pertinent correspondence): Universitätsarchiv Göttingen Phil. Dek. 187b Nr. 44. Her application to attend lectures dated “18./31.VIII.” (!) 1895 in: Sek. 555b.
34 Officially, this right was granted for women only in December 1911. Kovalevskaia had been denied the permission in 1881.
"In addition to the immediate purpose of acquiring mathematical knowledge in one of the best universities of Germany I also envisaged another practical aim while studying at Göttingen: to pave the way for Russian women to acquire Russian academic degrees by means of the Göttingen doctorate — you probably know that in Russia women cannot be admitted to the universities"35 (L. Sapolsky to D. Hilbert).

Zapol’skaia was well aware of the difference between women’s higher courses and a university. Neither in respect to the traditional privilege of universities to confer degrees nor in respect to the academic level were they equivalent. Instead of claiming that Russians were the pioneers of university education for women in Germany we should perhaps discuss whether the Russian graduates of German (and other foreign) universities set the stage for women to enter Russian universities36.

<table>
<thead>
<tr>
<th>Year</th>
<th>University</th>
<th>Origin*</th>
<th>Faculty</th>
<th>First woman from Russia</th>
<th>Last woman from Russia</th>
<th>Total of R. female graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1895</td>
<td>Freiburg</td>
<td>Dutch</td>
<td>Med.</td>
<td></td>
<td></td>
<td>37</td>
</tr>
<tr>
<td>1895</td>
<td>Heidelberg</td>
<td>German</td>
<td>Phil.</td>
<td>1903 Med.</td>
<td>1913</td>
<td>10</td>
</tr>
<tr>
<td>1895</td>
<td>Göttingen</td>
<td>Brit.</td>
<td>Phil. (Math)</td>
<td>1902 Phil. (Math)</td>
<td>1914</td>
<td>9</td>
</tr>
<tr>
<td>1895</td>
<td>Tübingen</td>
<td>German</td>
<td>Sciences</td>
<td>1909 Sciences</td>
<td>1913</td>
<td>5</td>
</tr>
<tr>
<td>1898</td>
<td>Halle</td>
<td>German</td>
<td>Phil.</td>
<td>1906 Phil.</td>
<td>1914</td>
<td>4</td>
</tr>
<tr>
<td>1899</td>
<td>Berlin</td>
<td>German</td>
<td>Phil. (Physics)</td>
<td>1904 Med.</td>
<td>1918</td>
<td>121</td>
</tr>
<tr>
<td>1900</td>
<td>Munich</td>
<td>Brit.</td>
<td>Phil. (Sciences)</td>
<td>1907 Phil. (Sciences)</td>
<td>1917</td>
<td>14</td>
</tr>
<tr>
<td>1901</td>
<td>Breslau</td>
<td>German</td>
<td>Phil. (Sciences)</td>
<td>1911 Phil.</td>
<td>1917</td>
<td>2</td>
</tr>
<tr>
<td>1901</td>
<td>Straßburg</td>
<td>German</td>
<td>Med.</td>
<td>1905 Phil.</td>
<td>1917</td>
<td>44</td>
</tr>
<tr>
<td>1902</td>
<td>Würzburg</td>
<td>Brit.</td>
<td>Phil.</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1903</td>
<td>Bonn</td>
<td>German</td>
<td>Med.</td>
<td>1908 Med.</td>
<td>1912</td>
<td>4</td>
</tr>
<tr>
<td>1904</td>
<td>Gießen</td>
<td>Russ.</td>
<td>Phil. (Sciences)</td>
<td>1904 Phil.</td>
<td>[1914]</td>
<td>24</td>
</tr>
<tr>
<td>1904</td>
<td>Königsberg</td>
<td>German</td>
<td>Phil.</td>
<td>1911 Med.</td>
<td>1917</td>
<td>6</td>
</tr>
<tr>
<td>1904</td>
<td>Erlangen</td>
<td>USA</td>
<td>Phil. (Sciences)</td>
<td>1914 Phil.</td>
<td>1915</td>
<td>4</td>
</tr>
<tr>
<td>1904</td>
<td>Jena</td>
<td>USA</td>
<td>Phil.</td>
<td>1913 Phil.</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>1905</td>
<td>Marburg</td>
<td>Japan</td>
<td>Med.</td>
<td>1913 Phil.</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>1906</td>
<td>Greifswald</td>
<td>German</td>
<td>Med.</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1906</td>
<td>Kiel</td>
<td>German</td>
<td>Med.</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1909</td>
<td>Münster</td>
<td>German</td>
<td>Phil.</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1909</td>
<td>Rostock</td>
<td>German</td>
<td>Phil.</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

* Country of birth and socialisation. Among the 290 women from the Russian Empire some were citizens of one of the constituent states of the German Empire or of Austria.

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35 "Während meiner Studien in Göttingen habe ich, abgesehen von dem directen Zwecke der Erwerbung der wissenschaftlichen mathematischen Kenntnisse in einer der besten deutschen Universitäten, noch ein anderes rein praktisches Ziel in’s Auge gefasst: mit Hilfe des erlangten Göttinger Doctorgrades auch in Russland den russischen Frauen die Bahn zum Erwerben der russischen wissenschaftlichen Grade zu brechen,- Sie werden wohl gehört haben, dass in Russland die Damen in die Universitäten nicht zugelassen werden können".

36 See O. A. Dobiash-Rozhdestvenskaia, who graduated from the Sorbonne in 1911 and earned the Russian magistr in 1915.
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