Chapter 3
Gender, Science, and the City

1

In 1886, when the physicist Ernest Mach asked, "How is humanity to progress safely if not even half of it is walking on an enlightened path?" women had not been accepted yet to the University of Vienna. As he argued in his popular scientific lectures, "The level of education and choice of profession for women should in no way be restricted."[1] In the mid-1890s, and while the acceptance of women at the University of Vienna was still under discussion, Mach, with his colleagues and the directors of the first and second Physics Institutes, Victor von Lang and Franz Exner, founded a committee for the support of women's admission to university studies.[2] Surprisingly, leading figures in Vienna's physics community, such as Exner, Mach, and Lang, all members of the intelligentsia and bourgeoisie, contributed immensely to creating a friendly environment for the young women of their social strata to create a space for themselves within the field of physics.

2

Cradled in fin de siècle Vienna, such physicists as the young Stefan Meyer inherited their cultural meanings about sexual difference and a collegial ethos of working in physics from Vienna's cultural and scientific milieu. At the turn of the century, Vienna was an extraordinary cultural setting where psychoanalysts, architects, artists, writers, musicians, politicians, philosophers, and scientists transformed their fields of knowledge, established new ones, and defined new ways of being. The city's intelligentsia produced distinct schools of thought in architecture, music, painting, philosophy, and psychology. Figures such as architects Adolf Loos and Otto Wagner, social critic Karl Kraus, composers Gustav Mahler and Arnold Schönberg, painters Gustav Klimt and Egon Schiele, philosopher and author Robert Musil, and the founder of psychoanalysis, Sigmund Freud, are only a few of those who marked the turn of the century, and they are among those who contributed to the myth of Vienna as one of the most creative milieus in Europe.

3

Starting in the early 1960s, the work of historian Carl Schorske became the dominant paradigm in understanding 1900 Vienna as the birthplace of a major part of modern culture and thought. The defeat of liberalism and the political crisis of the 1890s provided the context for elucidating the cultural success of the city. As Schorske argues, "the writers of the nineties were children of a threatened liberal culture."[3] Establishing their power in a struggle against aristocracy, liberals had their heyday between 1860 and 1880. By 1900, new political forces such as

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feminists, Social Democrats, and the anti-Semitic Christian Socials had gained enormous political influence. Although defeated by the new political forces, the liberals had already provided the space where the new social and political powers could evolve. The feverish urban reconstruction of the late 1880s and 1890s had created potential spaces of cultural and scientific activity in the margins of Ringstrasse. Viennese modernism was produced through the cultural elite's reaction to this "failure of liberalism."

4

As Steven Beller explains, the Schorskean paradigm turned Vienna into a fashionable topic of research, and until the 1980s Schorske's work was accepted as the canonical view of fin de siècle Vienna. Posing the question of the Viennese Jewish contribution to the modern culture, historians such as George Steiner and Ivar Oxaal seemed to threaten the Schorskean model by the mid-1980s. The acknowledgment by Schorske of the Jewish dimension to the production of Viennese culture was not enough. The new argument fully acknowledged the Jewish tradition and experience in Vienna's modern culture. More recent studies have further undermined the theses of the failure of Austrian liberalism, showing that the liberal bourgeoisie retained a great influence in the Austrian state through their economic and political power.[4] What has emerged from challenging Schorske's model is a more complex picture of the relationship between politics and culture in fin de siècle Vienna.

5

Part of the intellectual and cultural cartography of the era has been the strong women's movement that developed at the turn of the century. Overshadowed by the Schorskean paradigm, women's history in 1900 Vienna has been mostly neglected. According to Harriet Anderson's *Utopian Feminism*, the most frequently cited work on fin de siècle feminism, progressive Viennese women did not limit their interests to practical goals but aimed to a new social order and deeper sexual and moral reforms. Yet, they did campaign for more vocational opportunities such as the right to vote and a state-supported secondary and higher education.[5] They certainly succeeded in the latter cause. Before the end of the century, women were finally accepted to the University of Vienna thanks to the persistent petitions and campaigns by feminists, supported by the Social Democrats, and despite the counteractions of the conservative Christian Socialists.

6

However, the city of Vienna was not just the stage, a mere social and political setting for women's emancipation and high cultural reforms. It was also a sociospatial setting where the practices and characteristics of the urban environment molded meanings of sexual difference and progressive politics.[6] If

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the oldest historical parts of the inner city were identified with the nobility of the aristocrats, the area around the new university, the Mediziner-Viertel, nurtured the reformists. Science and culture, politics and philosophy encountered one another in a small quarter, all within a 15-minute walk. Instead of speaking about women's segregation from this extraordinary milieu, I choose to focus on the ways they were integrated into the culture of Viennese science, taking advantage of the locally specific articulations of class and gender in a space such as the Mediziner-Viertel.

Designing the University of Vienna

7

After the failure of the liberal revolution in 1848, in which the university faculty and students played an essential role, the imperial army of the Habsburg Empire occupied the old university in the inner city. As a result, institutes were scattered in the outer districts presenting the university with a disciplinary diaspora. The chemistry and physics institutes were moved into the third district of the city. The medical faculty was housed in the Josephinum at Wäringerstrasse in the ninth district and later moved to the old artillery industry in the corner of Schwarzspanierstrasse and Wäringerstrasse, behind the Votivkirche. Only the faculty of theology had moved to Stadkonvikt, in Dr. Ignaz-Seipel Platz next to the Academy of Sciences in the inner city, where lectures on philosophy and law were also held.[7] Clearly, the emperor aimed to dispel the intellectuals, enfeebling their political influence. At the same time, expelling most of them from the inner city was a strategy for ensuring the aristocrats' safety from any revolutionary threat.

8

During the 1850s, Vienna experienced an immense economic growth. Economic enterprises doubled, as did the population of Vienna. The textile industry became the main financial source for the empire and attracted a considerable number of workers from the countryside. Consequently, the Emperor Franz Joseph I decided in 1857 to extend the inner city of Vienna, decreeing that the military area around it be converted to civilian use. After assuming power in 1860, the liberals meanwhile saw Vienna as the center of their intellectual life and as a symbol of their ideological commitments. One of their first concerns was the architectural transformation of the city and soon the core of Vienna's urban reconstruction was the Ringstrasse.

9

A 60-foot-wide tree-lined boulevard in the shape of a ring replaced the walls around the inner city of Vienna and offered to the newly emerging bourgeoisie the space to fulfill its expectations. For example, textile manufacturers belonged to the

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group with the second highest ration of home owners in the Ringstrasse area after the nobility. As Schorske argues, "the art of building, used in the old city to express aristocratic grandeur and ecclesiastical pomp, now became the communal property of the citizenry, expressing the various aspects of bourgeois cultural ideal in a series of so-called Prachtbauten (buildings of splendor)."[8]

10 The Opernhaus (1869), the Parliament (1883/4), the Rathaus (1883), and other monumental buildings along the Ring indicated their purpose by their impressive architecture: parliamentary government, municipal autonomy, dramatic art, and liberal ideas. Since Vienna's university, however, signified the revolutionary and oppositional forces that played a central role in the revolution of 1848, attempts to include its new building on the Ringstrasse generated long-standing conflicts within the government and delayed its construction.

11 Already in 1849, Count Leo Thun-Hohenstein, the minister of education and religion, took a special interest in restoring the scientific and administrative autonomy of the university. The reform program included the architectural grouping of all university faculties and administrative offices. Thun's plan was to group several buildings around the main university site and create a *civitas universitatis* in Gothic style. In 1853, along the same lines, two of the most important architects of the time, Eduard van der Nüll and August von Sicardsburg, proposed a neo-Gothic design for the university. It was a complex of four buildings arranged around two inner courtyards. The first and main building hosted the philosophical faculty and the law faculty, lecture halls, and administration offices. The library was located in a separate building as were the chemistry and the physics institutes. A sacred edifice functioned as the university's church.[9] They proposed to locate it behind the Votivkirche, a Gothic basilica designed by Heinrich von Ferstel. Nonetheless, the plans met with the immediate objection of Ferstel, who disliked the proximity of two Gothic monumental buildings. For the next 15 years, given the obstructionism of the city, the lack of money, and Ferstel's opposition, Thun and his collaborators worked in vain to create the new university. It was only thanks to the liberals' initiatives that the university finally took its place on Ringstrasse in front of the Votivkirche.[10]

12 In 1868, the mayor of Vienna, Kajetan Felder, assigned Ferstel to provide new site plans for the university. Changing the architect in charge meant also modifying Thun's original ideal of the medieval *civitas universitatis.* Increasing needs related to Vienna's economic growth and industry as well as to scientific developments required different structures and architectural forms. Besides adding research