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BOOKSHELF

Scientific Saint

After scandals in France, Curie was embraced by American women as an intellectual icon.

Star Power



Marie Curie surrounded by a crowd of photographers aboard the SS Olympic in May 1921. PHOTO: GETTY IMAGES

By **EVAN HEPLER-SMITH**

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Marie Curie gave the world radium, but she did not give interviews. Self-sacrificing, altruistic and private: This is the figure built up in biographies of “the most inspirational female scientist of all time,” a title Curie won in a landslide in a 2009 poll of readers of the British magazine *New Scientist*. Even portraits that dwell on her less praiseworthy traits—suggesting that Curie disregarded the health and safety of her lab workers, for example—reinforce her image as the paradigmatic woman of science.

The “Marie Curie brand,” as a European Commission science initiative described it in 2013, has shaped public understanding not only of Curie but of modern scientists in general. In “*Making Marie Curie*,” Eva Hemmungs Wirtén shows how biographers and

popularizers, including Curie herself, fashioned the woman born Marya Sklodowska in 1867 into an enduring scientific persona.

MAKING MARIE CURIE

By Eva Hemmungs Wirtén
Chicago, 223 pages, \$35

In 1891, she left her native Warsaw for Paris to study physics and mathematics at the Sorbonne, where she met the young Parisian physicist Pierre Curie. They married in 1895. A year later, it was discovered that the element uranium emitted mysterious radiation. Curie, using instruments invented by her husband, discovered that certain uranium ores emitted even more than uranium itself. In 1898, she and Pierre announced their discovery of a new element, “radium,” which they predicted would display an unprecedented degree of the property that Marie christened “radioactivity.” After months of labor, the Curies isolated a sample.

Radium was a sensation—it glowed in the dark and seemed to be an effective treatment for cancer. Their work earned them accolades, including a share of the 1903 Nobel Prize in physics, but not money, because the Curies chose to publish the details of their process without patenting it.

Ms. Wirtén, a professor at Linköping University in Sweden, pays special attention to the decision not to patent and how it was treated in the founding texts of the Curie legend: Curie’s 1923 biography of her husband, “Pierre Curie,” and their daughter Eve’s 1937 biography of her mother, “Madame Curie.” The books each recount a conversation in which husband and wife agree that patenting their radium method would be contrary to the spirit of science.

It is not quite that simple. As Ms. Wirtén points out, the Curies derived a significant portion of their income from Pierre’s patents on instruments. Various factors besides beneficence could have affected their decision not to extend this approach to their radium process. Intriguingly, the author suggests that the ineligibility of women to own property under French law might have shaped Curie’s perspective. “Because the law excluded her from the status of person upon which these intellectual property rights depend,” Ms. Wirtén writes, “the ‘property’ road was closed to Marie Curie. The persona road was not.”

A tragedy propelled Curie further down the road of celebrity. In 1906, a year after reaching the pinnacle of French science—a professorship at the Sorbonne and membership in the academy of sciences—Pierre was run over by a carriage. He died instantly. A month later, the university invited Curie to take up her late husband’s

position. Already a unique figure, she became even more singular. She also became more famous. In 1911, Curie earned a second Nobel Prize, this one in chemistry, honoring her alone for her work on radium and radioactivity.

Having become a celebrity, Ms. Wirtén observes, Curie could also be attacked as one. In late 1911, Parisian newspapers reported that Curie had become romantically involved with her married colleague Paul Langevin and that the pair had fled Paris together. The affair was real, but they had left the city to attend a conference in Brussels, where they were busy laying the foundations of quantum physics with Einstein and Planck. Writers for the nationalist press now cast Curie as a scheming foreigner who “scientifically applied herself” to undermining an upright French marriage. Ms. Wirtén vividly captures the drama of these attacks and the forceful responses of Curie’s defenders, including a series of duels culminating in the physicist Langevin himself taking up a pistol to defend his lover’s honor.

Curie relied primarily on government support for her work. Searching for additional funding in the wake of World War I, she looked to America, where, Ms. Wirtén writes, “research and science played by another set of rules, celebrity rules.” The American Curie was crafted in large part by the New York journalist and socialite Missy Brown Meloney, a process that Ms. Wirtén reconstructs from the extensive correspondence of the two women. Meloney persuaded the reluctant Curie to embark upon a speaking tour and, in 1920, launched a campaign to raise \$100,000 from the women of America. Perhaps 1,000 American women inscribed their names in Meloney’s “radium book,” next to sums ranging from one dollar to tens of thousands. Mrs. Herbert Hoover arranged a bequest from the American Association of University Women; Mrs. Edsel Ford sent Curie a car. Through her scheme of “crowdsourcing,” Ms. Wirtén shows, Meloney made the Polish-French Marie Curie into a scientific celebrity whom American women could see as one of their own. “Madame Curie” was a French creation, but “Marie Curie” was made in America.

Curie would die in 1934, her radiation-induced illness providing a martyr’s ending to the biographies that established her as a kind of scientific saint. If the legend of Marie Curie represents the aspirations of modern science, “The Making of Marie Curie” shows how a diverse range of people, from biographers to philanthropists to Curie herself, created these aspirations in the first place.

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