

# The Washington Post

[Back to previous page](#)

## "Radioactive: Marie & Pierre Curie — A Tale of Love and Fallout" by Lauren Redniss

By Marcia Bartusiak, Published: November 11

With my first glance at "[Radioactive](#)" — the physical book — I was enchanted. Its textured cover, luminescent colors and oversize dimensions generated a feeling that I hadn't felt since I was a child: that anticipatory thrill as you prepare to turn the pages of a new book and savor each picture and its accompanying text.

Writer and artist Lauren Redniss has created a unique work difficult to categorize. A blend of original art, photographs, graphics and text, "Radioactive" — the first "visual book" to be named a finalist for the National Book Award in nonfiction — is meant to be both read and experienced. She even created a typeface that makes you think the printed words were done by hand.

Her subject is Marie Curie, the most iconic of women scientists, and her husband, Pierre. The facts of their lives have been distilled to the absolute essence, yet embellished with well-chosen quotations that establish the emotional currents the couple experienced as the years progressed.

Each lost an early love — he in France, she in Poland — a fate that emboldened Marie to flee to Paris to study mathematics and physics at the Sorbonne, one of 23 women out of a student body of 1,800. Soon after graduating, she met her future husband, a fellow physicist, at a tea in 1894. "I noticed the grave and gentle expression of his face," she recalled, "as well as a certain abandon in his attitude, suggesting the dreamer absorbed in his reflections." Picasso-like, black-on-white drawings depict this fateful moment: Pierre, cool and lithe on the left page, serenely gazes at a demure Marie, who on the right page looks down with large, pensive eyes. With a turn of the page, the two are now together, the room a burst of vibrant color, as if in celebration of the historic connection that had been made. Soon after this episode, they began their close collaboration, forging a life "consecrated entirely to scientific research," as Marie put it.

Marie's doctoral thesis explored the invisible radiation that appeared to emanate from uranium salts. This new science needed a name. Set at the bottom of a single photo of an atomic bomb blast spread over two pages, we read Marie's answer: "I coined the word radioactivity."

In this endeavor, Marie unveiled new elements — polonium and radium — by exhaustively purifying tons of pitchblende in a dilapidated wooden shed in Paris. "The glowing tubes looked like faint, fairy lights," Marie muses on a page of blue, the stylized containers harboring a soft white glow within.

Pierre experimented on himself as early as 1900 to see the effects of radium on his body. He strapped a tube of radium against his arm for 10 hours, and was later gleeful to see a lesion appear. As this story

Advertisement

Do you know your 2011 Credit Score?

Excellent
750 - 840
Good
660 - 749
Fair
620 - 659
Poor
340 - 619
I Don't Know
???

Find out INSTANTLY!

FreeScore.com

unfolds, there are side trips to the culture of the era — Pierre's dalliance with spiritualism, a dancer who wished to dress herself in the glow of radium — as well as some foreshadowing of the mysterious goings-on in the Manhattan project during World War II.

The same year, 1903, that Marie defended her doctoral thesis on radioactive substances, she and Pierre received the [Nobel Prize in physics](#). Though only 36 and 44, respectively, they were already in failing health. "Radioactivity had made the Curies immortal," writes Redniss. "Now it was killing them" — just as it later afflicted their daughter, Irène, and her husband, Frédéric Joliot, whose scientific research followed in the Curies' footsteps.

My wonder never ceased as I turned these pages: two bare, white pages with a single line scrolling across; a diagram of nuclear fission; stark photos of massive drill bits that dig holes for nuclear tests; Redniss's spartan artistic rendering of Pierre's body, aglow in radiation, being carried away after his death in 1906 in a traffic accident. Visual echoes of Matisse, Gauguin and Van Gogh play across the book's pages.

The prose is spare and simple, maintaining a metronomic beat that resonates with the underlying tragedies woven throughout the book. More than a biography, "Radioactive" reflects on many of the heart-rending repercussions that emanated from atomic research, from [Hiroshima](#) to [Chernobyl](#).

There's an occasional bump in the rhythm. An engaging narrative on Marie's scandalous love affair with physicist Paul Langevin, a married man, four years after Pierre's death is awkwardly interrupted by a confusing digression on surveillance techniques at a nuclear weapons complex. But such missteps are few as the book advances towards Marie's death. She finally succumbed in 1934 after years of radiation exposure. "Her fingers were barnacled with fibrous lesions from handling radium," writes Redniss. "She chronicled her own deterioration as laboratory data in neat columns on graph paper."

Finishing the book, I went back to the beginning and read it again. Just as I did with my favorite picture books as a child.

**bookworld@washpost.com**

**Marcia Bartusiak** is executive director of the MIT Graduate Program in Science Writing. Her latest book, "[The Day We Found the Universe](#)" on Edwin Hubble's discovery of the modern universe, won the 2010 Davis Prize of the History of Science Society.

#### Sponsored Links

53 Year Old Mom Looks 33

The Stunning Results of Her Wrinkle Trick Has Botox Doctors Worried

[www.consumerproducts.com](http://www.consumerproducts.com)

The Next Internet Boom

Stock Investment with 1,000% Potential Gains.

[www.smauthority.com](http://www.smauthority.com)

Royal Caribbean® Rewards

Inspire and Motivate Your Team with a Royal Caribbean® Cruise!

[www.RoyalCaribbeanIncentives.com](http://www.RoyalCaribbeanIncentives.com)

[Buy a link here](#)

© The Washington Post Company