

It was the year when a giant tsunami struck Japan. The magnitude of the earthquake was 8.2–8.5 on the Richter scale. The tsunami spread over Hokkaido to Miyagi Prefecture submerging everything in its way —Kamaishi Town in Kamihei District, Yoshihama Village and Ayasato Village, Kesen District in Iwate Prefecture and Onagawa Town in Miyagi Prefecture. At some places, the tsunami reached the height of 38.2 m above sea level. It was 15 June 1896. My mother's mother's mother Yoki Muto was three years old.

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I open my eyes in bed. The clock is ticking. I turn the light on. The light flickers on. I am 34 years old. If I had married at the age of 16 and had children when I was 18, like my mother's mother's mother, then my child would be 16 by now.

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In 1896, the same year the tsunami came, Europe was all about the X-ray discovered by Wilhelm Conrad Röntgen. Tagged "X" as the unknown quantity, it took the world by surprise, by showing the finger bones

with a ring worn and the inside of a machine. In Paris, France, physicist Antoine Henri Becquerel, who heard about the discovery of the X-ray, exposed a photographic plate with uranium salt during an experiment on fluorescence. This was the discovery of radiation.

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When I was 16, my mother took me on a trip to Paris. In the 5th arrondissement of Paris, we walked, with the river Seine behind us, from the Gare d'Austerlitz metro station to Rue Buffon. I was wearing my brand new Converse sneakers. I really wanted to dress up for Paris, so I nagged my mother enough to buy me a new pair at a local discount shoe store under an expressway overpass in Nerima, Tokyo. We strolled through the Paris Botanical Gardens. It was originally designed as the royal medicinal herb garden for Louis XIII. There was a rose garden, garden of the Alps and a zoo. I saw a *Robinia pseudoacacia* from the seventeenth century and pistachio trees from the eighteenth century. I saw the endangered Przewalski's wild horse. It was said that Becquerel discovered radiation there at the Maison de Cuvier. But now, I can't seem to remember the scenery as I saw it then.

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In 1898, at the physiochemical school on Rue Lhomond in Paris, Marie and Pierre Curie discovered polonium and radium. Polonium was named after Marie's home country Poland, and radium comes from the Latin word for ray. Marie also named the term "radiation". 45 months later, the Curies succeeded in extracting pure radium by treating 11 tons of uraninite. The three of them, Becquerel and the Curies, were awarded the Nobel Prize in Physics. It was for the "extraordinarily remarkable merit achieved by joint research on the radioactive phenomenon discovered by Henri Becquerel". One day, Becquerel was handed a glass tube of radium from the Curies that gave out a white bluish light. It was radium and what Marie called the "fairy light". Walking the streets of Paris with a light in his pocket, he ended up with a burn scar on the skin.



Daughter's daughter's daughter

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Yoki, my mother's mother's mother had a child, and that child had a child, and that child had a child, and another child later, here I am.

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Every time I hear the word Becquerel on the TV news, I think about my mother, my mother's mother, and my mother's mother's mother and the streets of Paris. I remember taking photos on Avenue des Champs Élysées, the cold morning air as I awoke at a hotel near the Gare du Nord, having salt and butter ramen in a ramen noodle shop and arguing with my mother in front of the Pantheon. Things invisible to the eye flowed into my body and the room. They shone. They left a mark.

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As they say the half-life for radium-226 is 1601 years, so 3503 will be the half-life for the radium that Marie



Daughter's daughter

and Becquerel held in their hands. I would probably be long gone by then, but if a single generation can be counted as 30 years, it will be 53 generations later; as the child of the child of the child... I don't think anyone will remember the name of my mother's mother's mother, 53 generations prior, but the radium will definitely keep shining.

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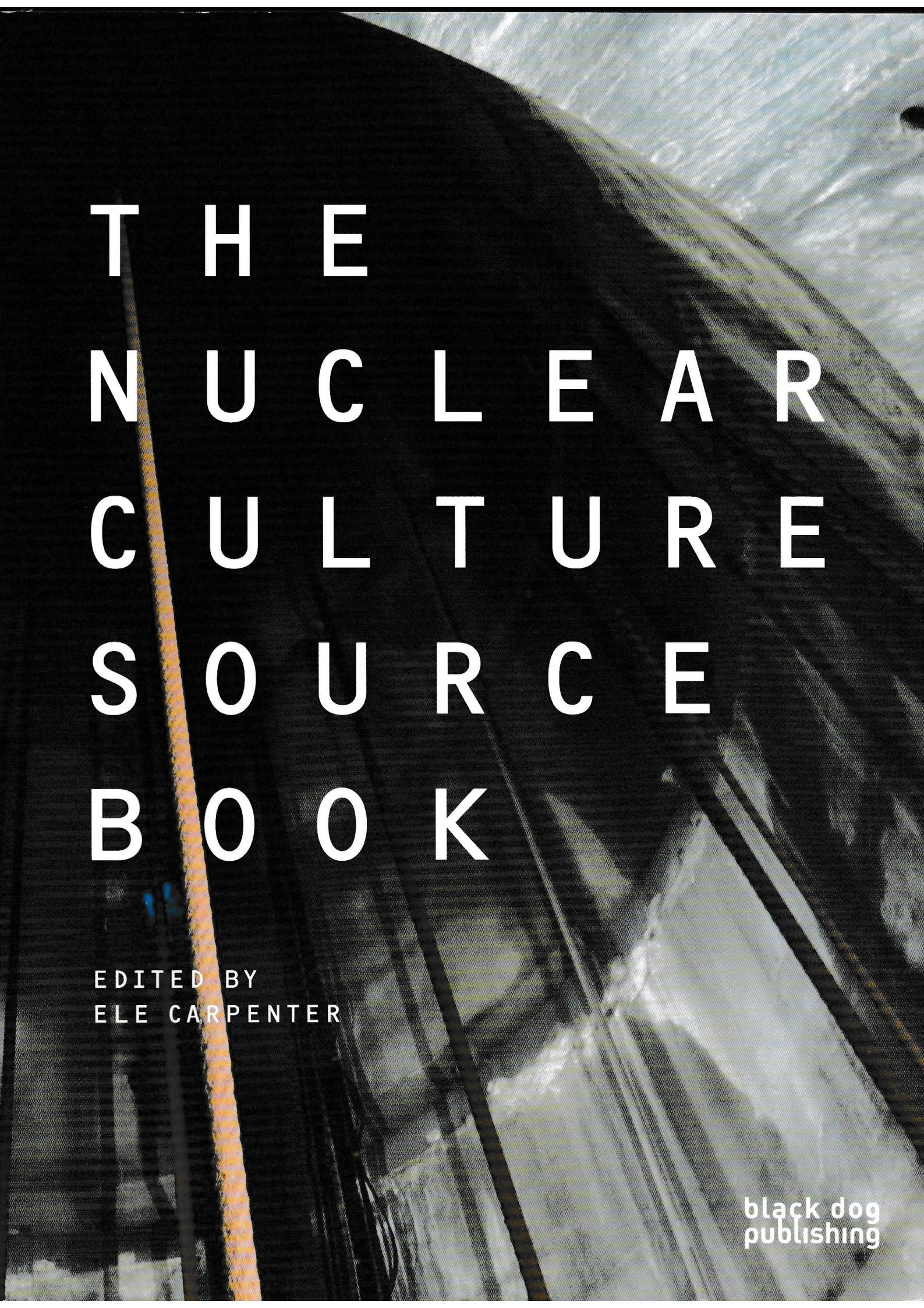
Now, I live in my mother's mother's house. My mother's mother who was 93 years old when she passed on last Christmas. The house is a small wooden two-storey building. The front door was dark brown but I painted it white. The white turnip soup is almost ready. The laurel tree in the yard had died from a disease. Soon, the night will come. I throw my hair ribbons on the floor. I was going to watch a DVD, but I hit the off switch. The light goes out. I close my eyes, in bed. I sleep. Soon, morning will come.



Daughter

Erika Kobayashi, *A Story of Mothers* 小林エリカ, translated by Kenichi Eguozhi.

Erika Kobayashi, *Half-Life Calendar: Radium-226*, drawings, 1601 numbered calendars, distributed in Tokyo, Auckland, New York, Maebashi, design by Mina Tabei.



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