

For many people, Sun was a great scientist. My experience of her was as a mother. In preschool one year, shortly before Halloween, the children had gone around the room and shared what their costumes were going to be. I told the whole class that I was going as an orca, but I failed to tell my parents about this until the night of October 30. So, my mother ran out with me to the fabric store to collect materials for the costume. She stayed up all night constructing an elaborate costume, using a small orca figurine of mine as a template, and she woke me periodically throughout the night for fittings. It was a fabulous costume: the head of the orca sat atop mine, with my face in its mouth, and the tail draped from my back to the ground. I wasn't able to find the costume in our house, but we came across some pictures yesterday.

My mother had a brilliant scientific mind, but, as a woman, she didn't always find support in her pursuit of technical study. In school, she originally signed up for the mathematics track, as her older brother had suggested that she should go into finance and make lots of money. Later, she snuck out to change her concentration to physical science. Throughout her life, she struggled with feeling that she should prioritize the needs of her family over her own.

Perhaps because of these experiences, when it came time to consider starting a family, she didn't want a child so much as she wanted a daughter. One she could raise to be inquisitive and assertive, to be her own person and not have her opportunities restricted by gender. She was supportive of my desires and my ideas, always encouraging me to ask questions and go after what I wanted.

One of her great joys during my childhood, I think, was teaching me to think scientifically, and to figure out the answers to my own questions. In the third grade, when I lost one of my last baby teeth, I left a cup of saltwater sitting out and came back later to find that there were salt crystals lining the inside. Wanting to repeat the phenomenon, I left some sugar water out in a bowl with some red food dye in it. This time, the crystals began forming at the top, creating a flat crystalline surface with liquid sugar water still underneath. I asked my mother what had gone wrong, and she told me to think about what I had done differently the second time - I determined that I'd used food coloring the second time, and sugar instead of salt.

So, my mother helped me set up an experiment to determine which variable had caused the change in crystal formation. She bought petri dishes and helped me whip up sugar and salt solutions - half with food coloring, half without. She photo-documented everything meticulously, and then had me write up the experiment for my 3rd grade science fair. As it turned out, regardless of the presence of food coloring, the sugar solution formed crystals at the surface of the liquid, and the salt solution formed crystals along the bottom and sides of the petri dish. I still think about that experiment - we used saturated solutions, and maybe a lower concentration of sugar would have behaved differently.

My mother floated in and out of my life during the worst years of her illness. Her schizophrenia made it difficult for her to be the mom I needed her to be, or the mom she wanted to be. There was a point where I had resigned myself to the fact that I would never fully have her as my mother again. And then, half way through college, she ended up in the hospital and went into treatment, and I finally had her back. While her personality was restored, she never fully recovered her ability to work, and that was really hard for her. My mother really grieved over the loss of so many productive years. Still, while dealing with her own depression and sense of loss, she found the energy to help me with my own mental health struggles.

Early last year, having gone off of her treatment for a while, she disappeared again. Several months later, I went to pick her up from middle-of-nowhere-Kansas, where she had ended up in the hospital, and I got to spend two days driving her back home. Those two days in the car with her will always be precious to me. For the first time in years, I got to connect with her, as my mother, with no distractions. She was different--energized and optimistic, eager to do what was necessary to keep her schizophrenia in check. She seemed at peace with the fact that her disease had limited her career, and that she could find meaning in her life in other ways.

Even though my time with her was much shorter than I would have liked, I'm grateful for everything she did to shape me into who I am today. Growing up, I had a lot of confidence in pursuing math and science, and it was largely due to her influence. She was a really special person: a bright scientist and a devoted mother. She will be greatly missed.